the Journal
MICHIGAN
STATE MEDICAL SOCIETY
OCTOBER 1961 • VOLUME 60 • NUMBER 10

GERIATRICS NUMBER

- - Keep them at work, busy with hobbies, active in community affairs

IN CERTAIN MENINGEAL INFECTIONS effective cerebrospinal fluid levels— effective antibacterial action

CHLOROMYCETIN®

(chloramphenicol, Parke-Davis)

In the management of certain meningeal infections, CHLOROMYCETIN offers unique advantages. It has been described by one investigator as "...the best chemotherapeutic agent for patients with *H. influenzae* meningitis...."[1] In comparative *in vitro* studies,[2] CHLOROMYCETIN showed the "highest effectiveness" against *Hemophilus influenzae, Diplococcus pneumoniae,* streptococcus, and numerous other pathogens. Another report states: "Chloramphenicol is regularly detected in the cerebrospinal fluid when blood levels greater than 10 micrograms per ml. are reached."[3] Blood levels of this magnitude are easily attainable with the administration of CHLOROMYCETIN by either the oral or parenteral routes.

CHLOROMYCETIN effectively penetrates the blood-brain barrier;[3-6] provides effective action against *H. influenzae*[1-4,7-9] and other invaders of the meninges.[5,7,10,11] Product forms are available for administration by the intravenous, intramuscular, and oral routes. For these reasons, CHLOROMYCETIN has contributed conspicuously to the dramatic drop in mortality rates in meningeal infections caused by *H. influenzae* and other susceptible microorganisms.

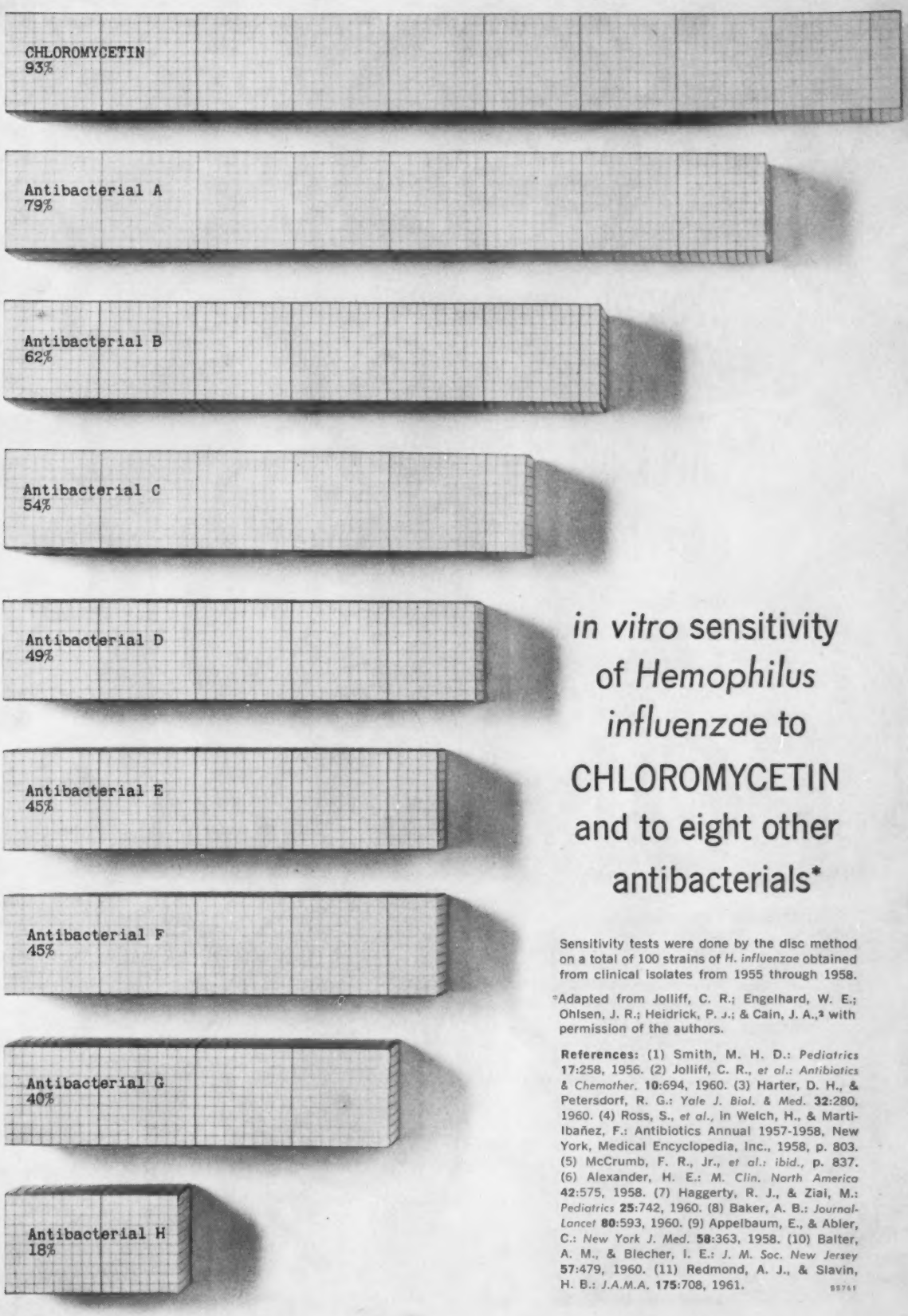
CHLOROMYCETIN (chloramphenicol, Parke-Davis) is available in various forms, including Kapseals® of 250 mg., in bottles of 16 and 100. See package insert for details of administration and dosage.

Warning: Serious and even fatal blood dyscrasias (aplastic anemia, hypoplastic anemia, thrombocytopenia, granulocytopenia) are known to occur after the administration of chloramphenicol. Blood dyscrasias have occurred after both short-term and prolonged therapy with this drug. Bearing in mind the possibility that such reactions may occur, chloramphenicol should be used only for serious infections caused by organisms which are susceptible to its antibacterial effects. Chloramphenicol should not be used when other less potentially dangerous agents will be effective, or in the treatment of trivial infections such as colds, influenza, or viral infections of the throat, or as a prophylactic agent.

Precautions: It is essential that adequate blood studies be made during treatment with the drug. While blood studies may detect early peripheral blood changes, such as leukopenia or granulocytopenia, before they become irreversible, such studies cannot be relied upon to detect bone marrow depression prior to development of aplastic anemia.

PARKE-DAVIS

PARKE, DAVIS & COMPANY, Detroit 32, Michigan



in vitro sensitivity of *Hemophilus influenzae* to CHLOROMYCETIN and to eight other antibacterials*

Sensitivity tests were done by the disc method on a total of 100 strains of *H. influenzae* obtained from clinical isolates from 1955 through 1958.

*Adapted from Jolliff, C. R.; Engelhard, W. E.; Ohlsen, J. R.; Heidrick, P. J.; & Cain, J. A.,[2] with permission of the authors.

References: (1) Smith, M. H. D.: *Pediatrics* **17**:258, 1956. (2) Jolliff, C. R., *et al.*: *Antibiotics & Chemother.* **10**:694, 1960. (3) Harter, D. H., & Petersdorf, R. G.: *Yale J. Biol. & Med.* **32**:280, 1960. (4) Ross, S., *et al.*, in Welch, H., & Martí-Ibañez, F.: Antibiotics Annual 1957-1958, New York, Medical Encyclopedia, Inc., 1958, p. 803. (5) McCrumb, F. R., Jr., *et al.*: *ibid.*, p. 837. (6) Alexander, H. E.: *M. Clin. North America* **42**:575, 1958. (7) Haggerty, R. J., & Ziai, M.: *Pediatrics* **25**:742, 1960. (8) Baker, A. B.: *Journal-Lancet* **80**:593, 1960. (9) Appelbaum, E., & Abler, C.: *New York J. Med.* **58**:363, 1958. (10) Balter, A. M., & Blecher, I. E.: *J. M. Soc. New Jersey* **57**:479, 1960. (11) Redmond, A. J., & Slavin, H. B.: *J.A.M.A.* **175**:708, 1961.

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All communications regarding advertising and subscriptions should be addressed to Wm. J. Burns, 120 W. Saginaw Street, East Lansing, Michigan. Telephone 337-1351.

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THE COVER

This month's cover portrays the various activities in which the senior citizen may occupy his time to advantage both in entertainment of self and in service to his community, a combination of work and play that leads to healthful old age.

IN THIS ISSUE

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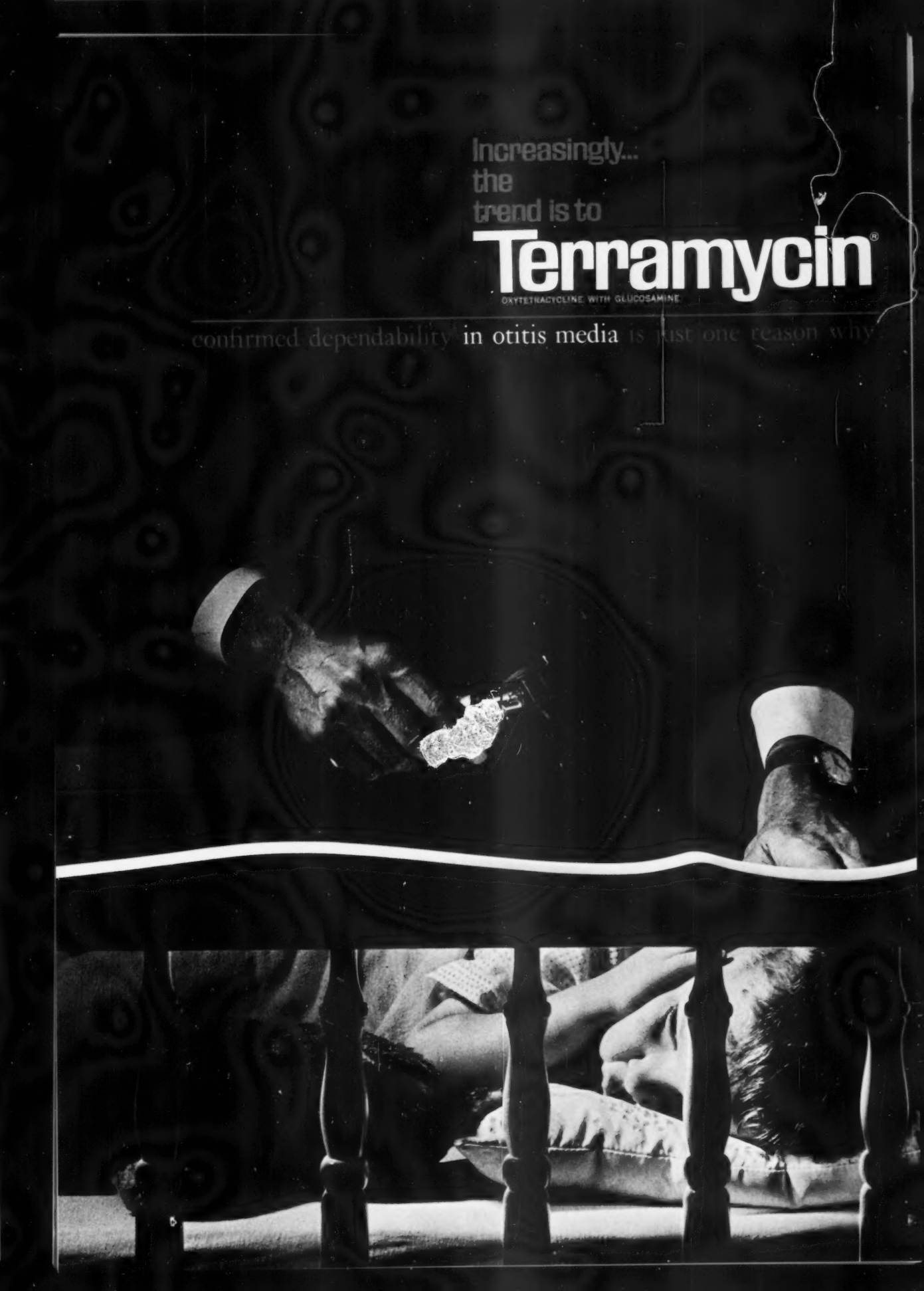

Increasingly...
the
trend is to
Terramycin®
OXYTETRACYCLINE WITH GLUCOSAMINE
confirmed dependability in otitis media is just one reason why

*New evidence** demonstrates the effectiveness of Terramycin in *otitis media* . . . another reason for the trend to Terramycin.

In a series of 41 cases of otitis media, Terramycin not only "was often successful where other antibiotics had failed," but also showed that "it is extremely well tolerated"; oral dosage for infants was 250 to 375 mg. daily, for children, 500 mg. to 1 Gm. In many instances, oral therapy was preceded by intramuscular injection of Terramycin.

The authors concluded that "there is good reason to consider it [Terramycin] one of the most effective agents for treatment of infection of the upper respiratory tract."

These findings confirm the continuing vitality and broad-spectrum dependability of Terramycin, as reported through more than a decade of extensive clinical use.

In brief

The dependability of Terramycin in daily practice is based on its broad range of antimicrobial effectiveness, excellent toleration, and low order of toxicity. As with other broad-spectrum antibiotics, overgrowth of nonsusceptible organisms may develop. If this occurs, discontinue the medication and institute appropriate specific therapy as indicated by susceptibility testing. Glossitis and allergic reactions are rare. Aluminum hydroxide gel may decrease antibiotic absorption and is contraindicated.

More detailed professional information available on request.

another reason why the trend is to Terramycin—*versatility of dosage form:*

TERRAMYCIN Capsules—
250 mg. and 125 mg. per capsule—for convenient initial or maintenance therapy in adults and older children

TERRAMYCIN Intramuscular Solution—
50 mg./cc. in 10 cc. vials; 100 mg. and 250 mg. in 2 cc. ampules—preconstituted, ready to use where intramuscular therapy is indicated

Terramycin®

OXYTETRACYCLINE WITH GLUCOSAMINE

SYRUP PEDIATRIC DROPS

125 mg. per tsp. and 5 mg. per drop (100 mg./cc.), respectively

deliciously fruit-flavored aqueous dosage forms—conveniently preconstituted

Science for the world's well-being® Pfizer

PFIZER LABORATORIES Division, Chas. Pfizer & Co., Inc.
New York 17, N. Y.

*Jacques, A. A., and Fuchs, V. H.: J. Louisiana M. Soc. 113:200, May, 1961.

Pfizer *Science for the world's well-being®*

Dear Doctor:

Reports from our representatives indicate that many physicians would appreciate simplification for prescription-writing purposes of the names of Terramycin products in both the "plain" and the "Cosa" dosage forms.

The "Cosa" forms originated, you may recall, on the basis of clinical evidence of enhanced antibiotic absorption when glucosamine is employed in oral administration. To permit each physician individually to study this evidence and choose which form he would prefer to prescribe, we offered Terramycin in both forms—that is, in the regular Terramycin forms without glucosamine, and in the "Cosa" forms with glucosamine.

This distinction appears to be no longer necessary since glucosamine, a highly acceptable excipient for oral antibiotics, now is being incorporated uniformly in all such forms, thereby simplifying nomenclature and your prescription writing.

Accordingly, and effective immediately, forms incorporating glucosamine will be offered simply as Terramycin without the "Cosa" prefix.

To make clear just which forms are affected, please refer to the brief tabulation (below) of Terramycin dosage forms both *before* and *after* this change. We are also requesting our representative to call on you at an early date to answer any questions that may arise.

We feel certain that this action, prompted by your comments and those of many other physicians, will simplify your writing of prescriptions for Terramycin products.

We welcome your comments on this action and on any other phase of our operations, since it is our objective to render every service as efficiently as possible to our friends in the medical profession.

Sincerely,
PFIZER LABORATORIES

The following table indicates the former name and the current name of Terramycin systemic preparations:

FORMERLY NAMED	NOW NAMED
Cosa-Terramycin® Capsules	**Terramycin**® Capsules*
Cosa-Terrabon® Oral Suspension	**Terramycin** Syrup
Cosa-Terrabon Pediatric Drops	**Terramycin** Pediatric Drops

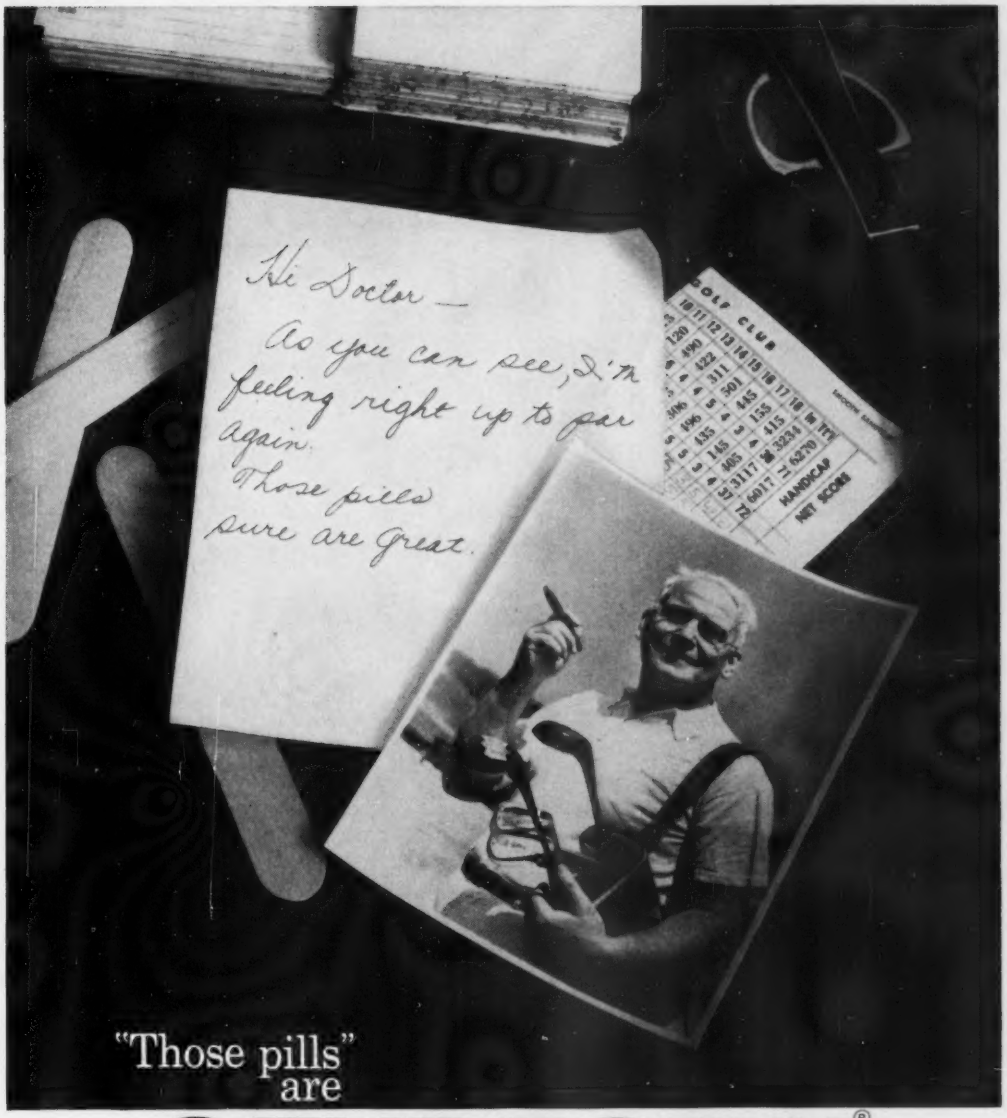
and simpler names for these Terramycin-containing formulations:

Cosa-Terrastatin® Capsules	**Terrastatin**® Capsules
Cosa-Terrastatin for Oral Suspension	**Terrastatin** for Oral Suspension
Cosa-Terracydin® Capsules	**Terracydin**® Capsules

. . . and these names remain unchanged:
Terramycin Intramuscular Solution
Terramycin Intravenous

**Terramycin Capsules* without glucosamine *are no longer available.*

The clinical versatility of Terramycin is enhanced by its specialized dosage forms adapted to individual needs—*another reason for the trend to Terramycin.*



GEVRESTIN®

Geriatric Vitamins—Minerals—Hormones—d-Amphetamine Lederle

one capsule every morning supplements the diet to help achieve proper balance: ❖ nutritionally ❖ metabolically ❖ mentally

Each dry-filled capsule contains: Ethinyl Estradiol, 0.01 mg. • Methyl Testosterone, 2.5 mg. • d-Amphetamine Sulfate, 2.5 mg. • Vitamin A (Acetate), 5,000 U.S.P. Units • Vitamin D, 500 U.S.P. Units • Vitamin B_{12} with AUTRINIC® Intrinsic Factor Concentrate, 1/15 N.F. Oral Unit • Thiamine Mononitrate (B_1), 5 mg. • Riboflavin (B_2), 5 mg. • Niacinamide, 15 mg. • Pyridoxine HCl (B_6), 0.5 mg. • Calcium Pantothenate, 5 mg. • Choline Bitartrate, 25 mg. • Inositol, 25 mg. • Ascorbic Acid (C) as Calcium Ascorbate, 50 mg. • l-Lysine Monohydrochloride, 25 mg. • Vitamin E (Tocopheryl Acid Succinate), 10 Int. Units • Rutin, 12.5 mg. • Ferrous Fumarate (Elemental iron, 10 mg.), 30.4 mg. • Iodine (as KI), 0.1 mg. • Calcium (as $CaHPO_4$), 35 mg. • Phosphorus (as $CaHPO_4$), 27 mg. • Fluorine (as CaF_2), 0.1 mg. • Copper (as CuO), 1 mg. • Potassium (as K_2SO_4), 5 mg. • Manganese (as MnO_2), 1 mg. • Zinc (as ZnO), 0.5 mg. • Magnesium (MgO), 1 mg. *Supply:* Bottles of 100 and 1,000.

REQUEST COMPLETE INFORMATION ON INDICATIONS, DOSAGE, PRECAUTIONS AND CONTRAINDICATIONS FROM YOUR LEDERLE REPRESENTATIVE OR WRITE TO MEDICAL ADVISORY DEPARTMENT.

LEDERLE LABORATORIES, A Division of AMERICAN CYANAMID COMPANY, Pearl River, New York

NEW...made from 100% corn oil UNSALTED MARGARINE FOR HYPERTENSIVE PATIENTS

* contains only 10 mgs. of sodium per 100 grams
* contains 50% liquid corn oil and 50% partially hydrogenated corn oil
* has 30% linoleic acid—10 times that of butter

Because of the relationship of high-sodium intake to elevated blood pressure, new Fleischmann's Unsalted Corn Oil Margarine will prove to be a valuable addition to the dietary regimen of your hypertensive patients. It contains only 10 mgs. of sodium per 100 grams.

Fleischmann's Unsalted Margarine is made from 100% corn oil and contains both liquid corn oil and partially hydrogenated corn oil. Its linoleic acid content of 30% is three times higher than the 10% of regular margarines and ten times higher than the 3% of butter. This is the *only* unsalted margarine made from 100% corn oil.

The substitution of Fleischmann's Unsalted Corn Oil Margarine for butter or ordinary margarines in your hypertensive patients' dietary regimen has the added advantage of increasing their intake of high polyunsaturates . . . important because of their association with hypertension and atherosclerosis.

If your hypertensive patient needs sodium restriction, recommend Fleischmann's Unsalted. It has a light, delicate taste that he'll like. Tell him that it is available in his grocer's frozen food case.

Write now for physician booklet of 5 coupons—each coupon redeemable by your patient for 1 lb. of Fleischmann's Unsalted Margarine. Address Fleischmann's Unsalted Margarine, 625 Madison Avenue, N. Y. 22, N. Y. *Distribution presently limited in some areas.*

In line with the suggestion of the American Heart Association to manufacturers, we are listing the fatty acid composition of Fleischmann's Unsalted (Sweet) Margarine:

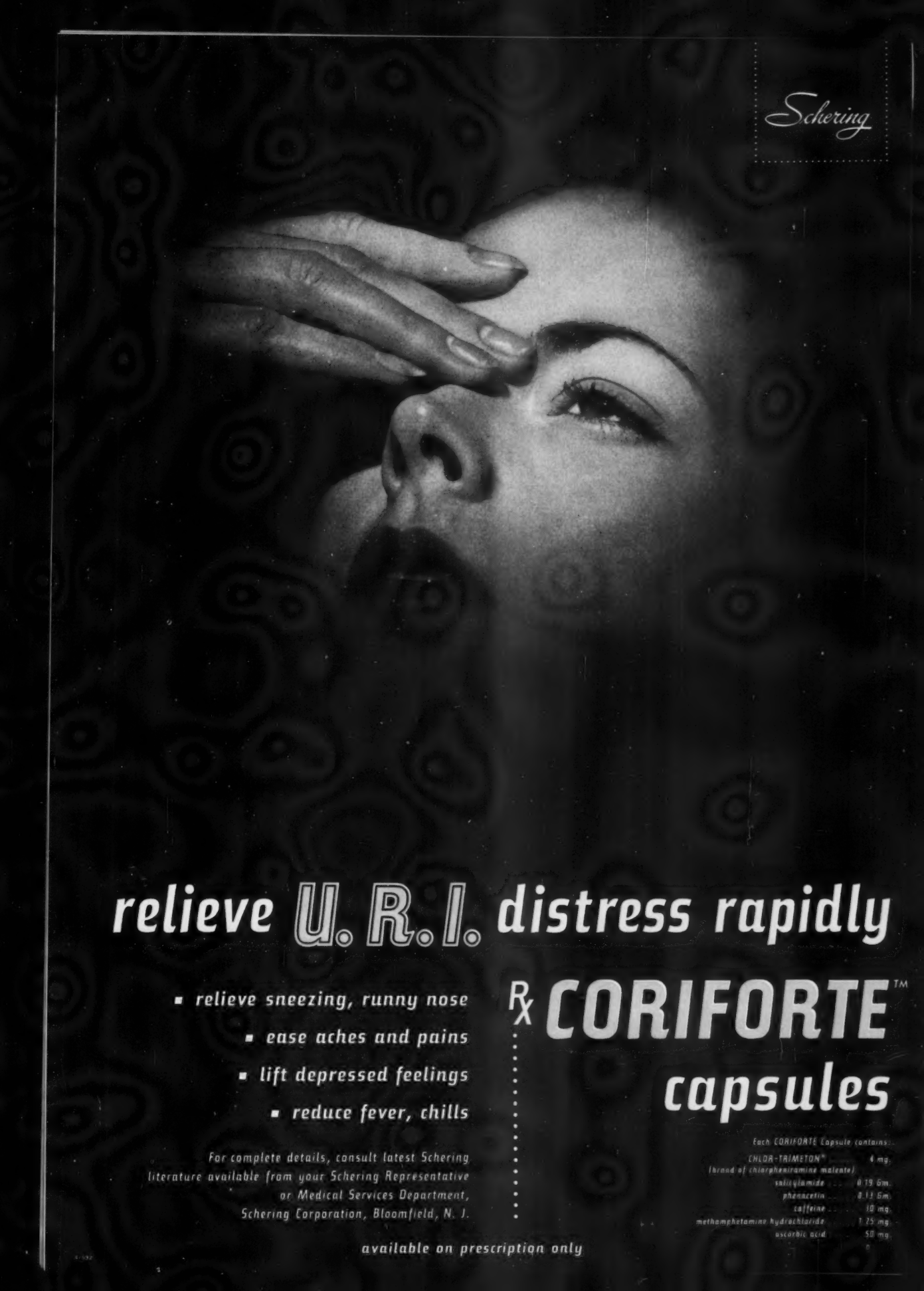
Unsaturated Fatty Acids:	
Polyunsaturates	30%
Monounsaturates	50%
Saturated Fatty Acids	20%
	100%

AVERAGE DAILY INTAKE
Two Ounces or Eight Pats of Fleischmann's Corn Oil Margarine Will Supply

Corn Oil—Liquid	22.7 Gm.
Corn Oil—Partially Hydrogenated	22.7 Gm.
Iodine Value	90-95
Sodium (dietetically sodium-free)	6 Mgs.
Linoleic Acid	13.6 Gm.
Vitamin A (Adult's Need)	47%
Vitamin A (Child's Need)	62%
Vitamin D (Adult's and Child's Need)	62%

Fleischmann's
Fresh-Frozen in the green foil package in your grocer's frozen food case

ONLY UNSALTED MARGARINE MADE FROM 100% CORN OIL


Schering
relieve U.R.I. distress rapidly
▪ relieve sneezing, runny nose
▪ ease aches and pains
▪ lift depressed feelings
▪ reduce fever, chills
℞ CORIFORTE™
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Each CORIFORTE Capsule contains:
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salicylamide 0.19 Gm.
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methamphetamine hydrochloride 1.25 mg.
ascorbic acid 50 mg.
For complete details, consult latest Schering literature available from your Schering Representative or Medical Services Department, Schering Corporation, Bloomfield, N. J.
available on prescription only

President's Page

CONTINUED LEADERSHIP NEEDED

President
Michigan State Medical Society

Your Michigan State Medical Society recently presented a statement about medical care of the aged to the Ways and Means Committee of the House of Representatives of the Congress of the United States. Our immediate objective was the defeat of the Social Security approach, i.e., H.R. 4222. We said, "Such an approach is compulsory national health insurance, and that compulsory national health insurance is socialized or nationalized medicine."

We pointed with pride to the Michigan medical profession's history of "first" in providing the means of securing medical care for those who needed it. Michigan State Medical Society Pioneering in developing Blue Shield was described.

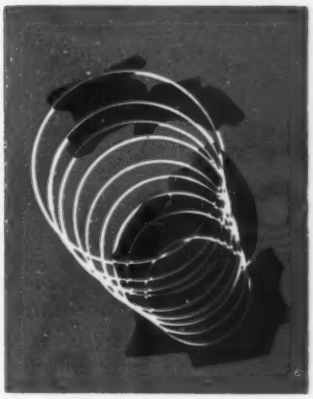
Our state's pre-eminence in its program for providing medical aid to the aged received special attention. We reported that "The Michigan M.A.A. plan was heartily endorsed by the Michigan State Medical Society as a plan that would meet the medical needs of Michigan's elderly citizens who require financial help." And it is.

Our positive approach to medical care of the aged was cited as good reason why the Social Security plans were unnecessary. If we are called upon to appear before Congress next year we hope to be able to report more progress.

Our continued leadership in this whole area of medical care is expected by everyone. We must be certain that current M.A.A., O.A.A., voluntary insurance and other programs are doing the job. We should be the first to suggest improvements where they are needed.

The component medical societies have a key role in diagnosing and solving local problems regarding medical care for the aged. This should be a high priority item. Important, too, is the providing of pertinent local information to the MSMS for action at the state level where necessary.

Public and private health and welfare agencies concerned with medical care programs need more of our leadership and participation than ever before.



Clinic Days Offer Postgraduate Education

Once again, the Michigan State Medical Society through its Committee on Postgraduate Medical Education will offer Clinic Day programs across the state. Cooperating in this extensive education project will be the two Michigan colleges of medicine and numerous county medical societies.

Plans for the 1961-62 locations along with suggested topics have been approved by The MSMS Council. The Committee is advancing the details now with local leaders to develop the fall programs.

* * *

THE COMMITTEE REPORTS that a clinic will be re-established at Petoskey. Interested persons in that area were interviewed and it was reported that the Petoskey-Charlevoix area doctors are eager for a renewal of their former program.

Possibilities of developing a center in the Thumb Area also is being considered by the Committee. It has been pointed out that doctors in that area cannot easily attend the other clinic programs.

* * *

ALTHOUGH FINAL TOPICS have not been determined and although various clinics select different topics, the following subjects are being considered: "Radioactive Isotopes," "Anesthesia, Old and New," "Pre and Post Operative Care," "Seizure Control," "Hemolytic Diseases of the Newborn" and "Obstetrical Infections."

Other suggested subjects include "Mental Retardation," "Chemotherapy of Hypertension," "Management of Elderly-Confused Person," "Casual Thyroid and Casual Goiter," "The 'Missed' Fracture," and "Visual Evidence of Neoplasm."

The following communities hosted clinic day programs last fall and/or spring—Alpena, Battle Creek, Bay City, Cadillac, Jackson, Lansing, Midland, Muskegon, Niles, Port Huron, Roscommon, and Traverse City—and also the following Upper Peninsula communities —Escanaba, Houghton, Iron Mountain, Ironwood, Marquette, Menominee, Sault Ste. Marie.

Although attendance figures may not always be complete, the Committee reports that a total of 613 participated in the clinic days last fall. The spring figure, with two less clinics, drew 483.

John M. Sheldon, M.D., Ann Arbor, is chairman of the MSMS Committee on Postgraduate Medical Education.

Following is a calender of the Clinic Day locations and dates for the Fall.

Alpena: Thursday, October 12
Battle Creek: Thursday, October 19
(Calhoun County Clinic Day)
Jackson: Tuesday, October 17
Lansing: Tuesday, September 19
Midland: Monday, November 13
Muskegon: Friday, October 20
Niles: Tuesday, October 17
Petoskey: Thursday, November 9
Port Huron: Tuesday, November 7

Roscommon: Wednesday, October 18
Traverse City: Thursday, December 7

Upper Peninsula:

Sault Ste. Marie: Monday, November 6
Escanaba: Tuesday, November 7
Menominee: Wednesday, November 8
Iron Mountain: Thursday, November 9
Ironwood: Tuesday, November 7
Houghton: Wednesday, November 8
Marquette: Thursday, November 9

Lansing Cooperative Efforts Explained at AMA Institute

An excellent example of "Community Action on Aging" was cited by Frederick C. Swartz, M.D., Lansing, at the 1961 Annual AMA Institute at Chicago for 400 medical society leaders and lay executives.

Dr. Swartz, chairman of AMA's Committee on Aging, illustrated case study of a new rehabilitation program offering both outpatient and inpatient services to handicapped persons, which was organized in Lansing, under the leadership of a local medical society in cooperation with other health and civic groups.

The Ingham County Rehabilitation Center, organized as a voluntary agency, represents a model for the conduct of a total rehabilitation program, said Dr. Swartz, including evaluation, treatment, teaching, research and vocational services, in association with local hospitals. Through a cooperative program with Rehabilitation Industries, Inc., a vocational rehabilitation workshop for handicapped persons, the program also encourages and utilizes the productivity of the rehabilitated handicapped. Medical policies and procedures of the rehabilitation program are directed by a medical advisory committee, appointed each year by the Ingham County Medical Society.

"The program is unique," Dr. Swartz said, "in that it represents an interdisciplinary team approach to the handicapped aged, and demonstrates how a completely separate rehabilitation service can move into a general hospital, and through cooperation and collaboration, adjust itself to overlapping spheres of service, influence and administration." Dr. Swartz also dealt with the transportation problems of the aged, and the research studies being done to alleviate these problems.

Important Voice

Question: The AMA has accomplished much in its fight against quacks, its drug council and other activities; how does the AMA communicate with its members?

Answer: The establishment of the *Journal AMA* has been the lifeblood and heart of the Association.

* * *

The matter of establishment of the *Journal* as the property of the Association was first proposed in 1852, when J. B. Flint, M.D., of Kentucky, proposed to amend the Constitution to provide for the establishment and maintenance of a quarterly journal. The gradual development of sentiment toward the publication of a weekly periodical culminated with the establishment of the *Journal AMA* in 1883.

Ever since its founding, the *Journal* has been a powerful voice of the medical profession in raising the standards of medical education, investigating the preparations and composition of drugs and pharmaceutical preparations, compiling and publishing an official directory of the profession and supporting one campaign after another for the advancement of medical science and the provision of medical care to all the people.

The *Journal* today has the largest circulation of any medical periodical in the world. It is mailed each week to more than 180,000 physicians.

The AMA also publishes 10 specialty journals and *Today's Health*, a health magazine for the public.

On Red Cross Program

Otto K. Engelke, M.D., Ann Arbor, president of the Michigan State Medical Society, participated in the Red Cross Statewide Conference in Flint, September 29-30. Doctor Engelke served as chairman and moderator at the Blood Program Workshop.

"I just read that when Herbert Hoover was president he gave all his salary back to the government. Now they got us all doin' it."

—Herb Shriner

MICHIGAN MEDICAL MEETINGS AND CLINIC DAYS

November 7-8-9	Michigan Academy of General Practice Annual Fall Postgraduate Clinic	Detroit
December 6	Michigan Regional Committee Annual Symposium on Trauma	Detroit
February 3	MSMS County Secretaries'-Public Relations Seminar	East Lansing
February 10	Michigan Heart Day	Detroit
Feb. 28, Mar. 1-2	Michigan Clinical Institute	Detroit

Injectable potency in oral form

Potent B-Complex with 500 mg. of C

Actual size of a capsule containing the B-Complex and liver in Surbex-T

Size of a standard 500-mg. tablet of ascorbic acid

Actual size of a compact Surbex-T Filmtab

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SURBEX-T™.. part of therapy when the water soluble vitamins are depleted or demands increased

During acute or chronic illnesses:

- Cardiovascular conditions
- Gastrointestinal disorders
- Liver disorders
- Hyperthyroidism

Before or after surgery.

In severe burns, fractures, infections.

During prolonged oral administration of antibiotics; during radiation therapy.

When restrictive diets follow depletions caused by illness.

For depletions due to alcoholism.

Each Filmtab® Surbex-T represents:

Thiamine Mononitrate (B_1)	15 mg.
Riboflavin (B_2)	10 mg.
Nicotinamide	100 mg.
Pyridoxine Hydrochloride	5 mg.
Cobalamin (Vitamin B_{12})	4 mcg.
Calcium Pantothenate (as calcium pantothenate racemic)	20 mg.
Ascorbic Acid (as sodium ascorbate)	500 mg.
Desiccated Liver, N. F.	75 mg.
Liver Fraction 2, N. F.	75 mg.

Supplied in bottles of 100 and 1000

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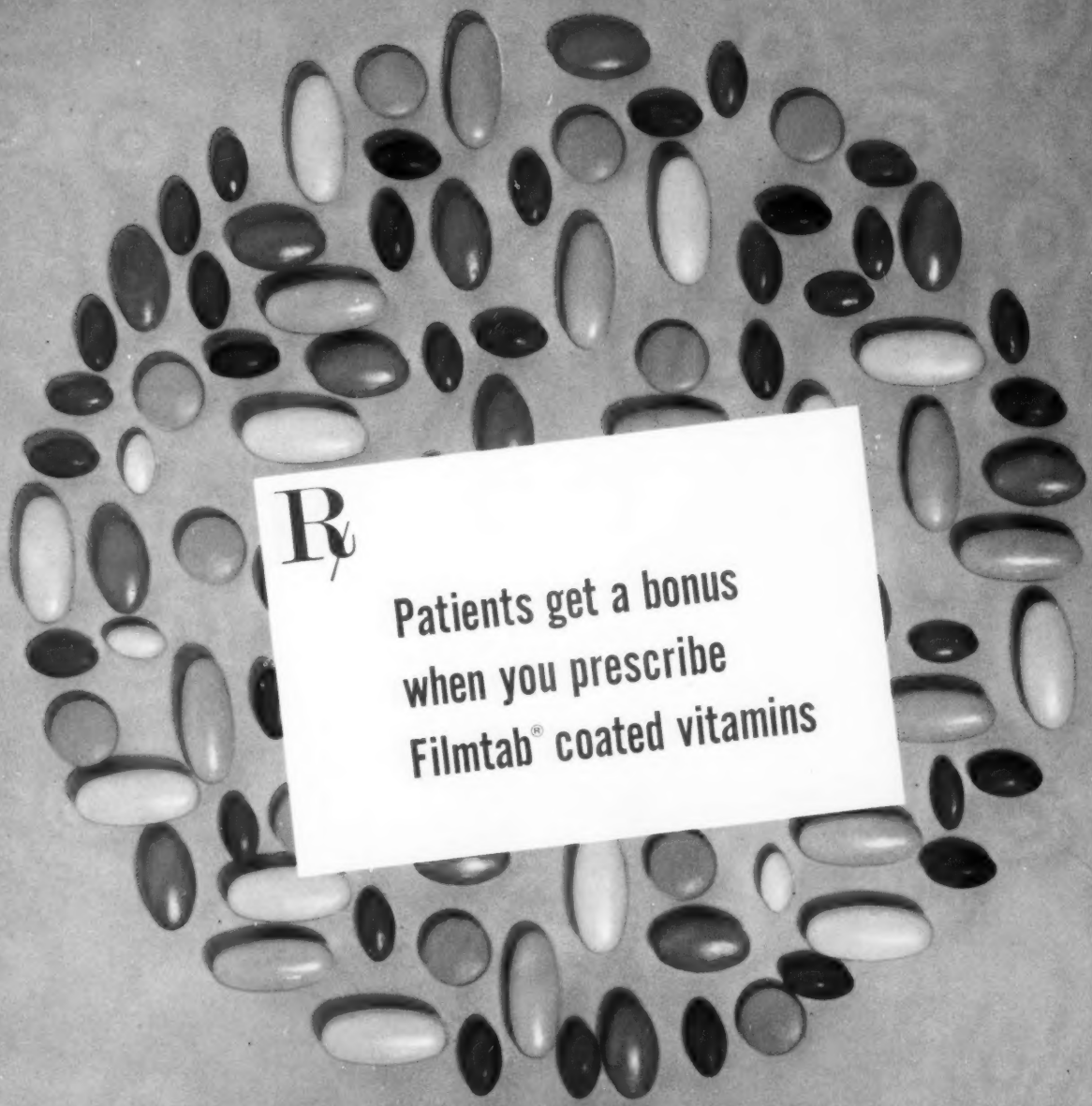
. . . and, when need is modified, **SUR-BEX with C,** Abbott's improved B-complex formula with 250 mg. of C.



No water is used in the Filmtab process. Potency is enhanced as there is virtually no chance of moisture degradation to nutrients. Shellac sub-seal barriers are not needed or used.

This contrasts with other methods of manufacture. Moisture is actually a part of the gelatin capsule, while sugar coatings must be applied with water.

There are other Filmtab advantages, too, and several of these can be particularly appreciated by your patients.

Odor and after-taste are sealed inside the colorful Filmtab.

Tablets are up to 30% smaller, and *much* easier to swallow.

This latter point furnishes still further benefits. Absorption is speeded as sugar's bulk and sub-seals are eliminated. Filmtab coatings are less likely to break or crack, as sugar is crystalline in nature.

In short, while good formulas may be similar, formulations *do* differ. Filmtab coatings can often furnish a logical basis for choice.

Filmtab coated Vitamins by Abbott

B-complex with C formulas
Surbex-T™
Sur-bex® with C

Maintenance Formulas
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Therapeutic Formulas
Optilets®
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Put your low-back patient back on the payroll

Soma relieves stiffness —stops pain, too

YOUR CONCERN: Rapid relief from pain for your patient. Get him back to his normal activity, fast!

HOW SOMA HELPS: Soma provides direct pain relief while it relaxes muscle spasm.

YOUR RESULTS: With pain relieved, stiffness gone, your patient is soon restored to full activity—often in days instead of weeks.

> Kestler reports in controlled study: *Average time for restoring patients to full activity: with Soma, 11.5 days; without Soma, 41 days.* (*J.A.M.A. Vol. 172, No. 18, April 30, 1960.*)

Soma is notably safe. Side effects are rare. Drowsiness may occur, but usually only in higher dosages. Soma is available in 350 mg. tablets. **USUAL DOSAGE: 1 TABLET Q.I.D.**

The muscle relaxant with an independent pain-relieving action

SOMA®

(carisoprodol, Wallace)

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Today's little "limey" needs a half barrel of orange juice

...or, to be exact, a total of 2,106 ounces in his first two years. And how much he'll need during his first twenty years would have to be measured by the truckload, because the need for the nutrients contained in Florida orange juice continues throughout life.

How our little "limey" or any of your other patients obtain the vitamins and nutrients found in citrus fruits is important to them and to you. There are so many wrong ways, so many substitutes and imitations for the real thing.

For a way that combines real nutrition with real pleasure, there's nothing better than the oranges and grapefruit ripened under Florida's own sunshine. Somehow, nothing can surpass the result of the combination of sun, air, temperature, and soil found in Florida.

It's good nutrition to encourage people to drink orange juice. It's even more judicious to encourage them to drink the juices and eat the fruits watched over by the Florida Citrus Commission. These men set the world's highest standards of quality in fresh, frozen, canned, or cartoned citrus fruits and juices.

When you suggest to your patients that they have a big glass of orange juice for breakfast, or for a snack, or when they want to raid the refrigerator, the deliciousness of Florida orange juice will give you assurance that they'll *want* to carry out your recommendation. You'll be helping them to the finest drink there is—by the glassful or the barrel.

an added measure of protection for little patients

against relapse
against "problem" pathogens

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pediatric drops
syrup

● full antibiotic activity ● lower milligram intake per dose ● up to 6 days' activity with 4 days' dosage ● uniformly high, sustained peak activity ■ **syrup** (cherry-flavored), 75 mg./5 cc. tsp., bottles of 2 and 16 fl. oz. Dosage: 3 to 6 mg./lb./day—in four divided doses. **pediatric drops,** 60 mg./cc., 3 mg./drop, 10 cc. bottles with calibrated dropper. Dosage: 1 to 2 drops/lb./day—in four divided doses.

PRECAUTIONS: As with many other antibiotics, DECLOMYCIN may occasionally give rise to glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis or dermatitis. A photodynamic reaction to sunlight has been observed in a few patients on DECLOMYCIN. Although reversible by discontinuing therapy, patients should avoid exposure to intense sunlight. If adverse reaction or idiosyncrasy occurs discontinue medication. Overgrowth of nonsusceptible organisms is a possibility with DECLOMYCIN, as with other antibiotics. The patient should be kept under observation.

Request complete information on indications, dosage, precautions and contraindications from your Lederle representative, or write to Medical Advisory Department.

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For your patients with infections or other illnesses who need therapeutic vitamin support. Each Theragran supplies the essential vitamins in truly therapeutic amounts:

Vitamin A	25,000 U.S.P. Units
Vitamin D	1,000 U.S.P. Units
Thiamine Mononitrate	10 mg.
Riboflavin	10 mg.
Niacinamide	100 mg.
Vitamin C	200 mg.
Pyridoxine Hydrochloride	5 mg.
Calcium Pantothenate	20 mg.
Vitamin B_{12}	5 mcg.

SQUIBB *Squibb Quality—the Priceless Ingredient*

'Theragran'® is a Squibb trademark

"nutrition...present as a modifying or complicating factor in nearly every illness or disease state"[1]

1. Youmans, J. B.: Am. J. Med. 25:659 (Nov.) 1958

cardiac diseases "Who can say, for example, whether the patient chronically ill with myocardial failure may not have a poorer myocardium because of a moderate deficiency in the vitamin B-complex? Something is known of the relationship of vitamin C to the intercellular ground substance and repair of tissues. One may speculate upon the effects of a deficiency of this vitamin, short of scurvy, upon the tissues in chronic disease."[2] 2. Kampmeier, R. H.: Am. J. Med. 25:662 (Nov.) 1958.

arthritis "It is our practice to prescribe a multiple vitamin preparation to patients with rheumatoid arthritis simply to insure nutritional adequacy . . ."[3]
3. Fernandez-Herlihy, L.: Lahey Clinic Bull. 11:12 (July-Sept.) 1958.

digestive diseases Symptoms attributable to B-vitamin deficiency are commonly observed in patients on peptic ulcer diets.[4] Daily administration of therapeutic vitamins to patients with hepatitis and cirrhosis is recommended by the National Research Council.[5] 4. Sebrell, W. H.: Am. J. Med. 25:673 (Nov.) 1958. 5. Pollack, H., and Halpern, S. L.: Therapeutic Nutrition, National Academy of Sciences and National Research Council, Washington, D. C., 1952, p. 57.

degenerative diseases "Studies by Wexberg, Jolliffe and others have indicated that many of the symptoms attributed in the past to senility or to cerebral arteriosclerosis seem to respond with remarkable speed to the administration of vitamins, particularly niacin and ascorbic acid. These facts indicate that the vitamin reserve of aging persons is lowered, even to the danger point, more than is the case in the average American adult."[6] 6. Overholser, W., and Fong, T.C.C. In Stieglitz, E. J.: Geriatric Medicine, 3rd edition, J. B. Lippincott, Philadelphia, 1954, p. 264.

infectious diseases Infections cause a lowering of ascorbic acid levels in the plasma; and the absorption of this vitamin is reduced in diarrheal states.[7] 7. Goldsmith, G. A.: Conference on Vitamin C. The New York Academy of Sciences, New York City, Oct. 7 and 8, 1960. Reported in: Medical Science 8:772 (Dec.10) 1960.

diabetes Diabetics, like all patients on restricted diets, require an extra source of vitamins.[8] "Rigidly limiting the bread intake of the diabetic patient automatically eliminates a large amount of thiamin from the diet. . . . There is some evidence of interference with normal riboflavin utilization during catabolic episodes."[9]
8. Duncan, G. G.: Diseases of Metabolism 4th edition W. B. Saunders, Philadelphia, 1959, p. 812. 9. Pollack, H.: Am. J. Med. 25:708 (Nov.) 1958.

FOR FULL INFORMATION SEE YOUR SQUIBB PRODUCT REFERENCE OR PRODUCT BRIEF.

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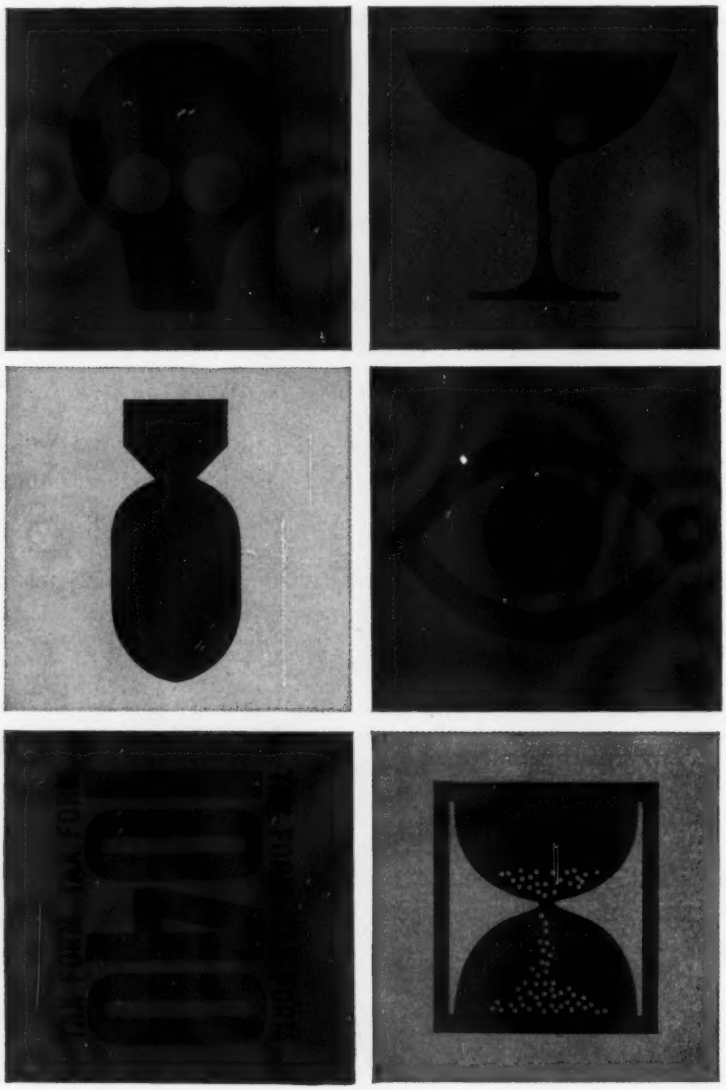
Symbols of the Age of Tension/Anxiety



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allays TENSION/ANXIETY...
maintains acuity... promotes eunoia*...
facilitates somatic diagnosis and therapy

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lifts the facade of TENSION/ANXIETY New Listica allays tension/anxiety in as many as 89% of cases,[2-13] by selectively inhibiting impulses through internuncial pathways of the central nervous system. Whether the patient's tension/anxiety is psychosomatic or a complication of somatic disorder, Listica reduces or eliminates the excess impulsivity seen in tension/anxiety states.

maintains normal acuity Unlike many drugs, Listica does not affect unconditioned response or normal motor activity. Thus, Listica allays tension and anxiety without inducing apathy or impairing acuity; patients are able to pursue normal activities, such as driving, reading, writing, etc., without interference from drug therapy.

enhances physician-patient rapport As it removes tension/anxiety, fear and frustration, **LISTICA PROMOTES EUNOIA***—"a normal mental state." It bares the patient's true somatic condition, and facilitates diagnosis and therapy. Patients are more tractable to concomitant drug therapy, respond better, faster.

without known toxicity or contraindications Listica is safe, as well as effective. Chronic studies[14] in rats (12 months) and dogs (6 months) were free of toxic manifestations at oral dosage levels as high as 200 mg./kg./day (approximately 10 times the recommended human dosage). No macroscopic or microscopic changes in tissues, organs or blood indicative of toxicity were observed, even at doses up to 320 mg./kg. In humans, there have been no adverse blood, urine or cardiac changes; liver profiles were negative, and jaundice has not been noted.

without serious side effects or habituation During three and one-half years of clinical study in 1,759 patients,[2-13] Listica has produced no serious side effects. Less than 4% of patients experienced any side effects, and these were invariably minor and transient. Most frequent (38 cases) was mild drowsiness, which disappeared after the first few days of Listica therapy. Habituation, cumulative effects, or withdrawal symptoms have not been noted, even in patients taking Listica as long as two years.

with convenient dosage and availability One Listica tablet, q.i.d., is the recommended dosage. Listica is supplied in bottles of 50 tablets on prescription only, by pharmacies everywhere. Each tablet contains 200 mg. of Hydroxyphenamate, Armour.

References:

[1]Bastian, J. W.: Classification of CNS Drugs by a Mouse Screening Battery. To be published in Intern. Arch. de Pharmacodynamie; [2]Hubata, J. A., and Hecht, R. A.: Review of Clinical Use of Hydroxyphenamate (Listica) in 1,759 Patients. To be published in Clinical Medicine; [3]Taub, S. J.: Management of Anxiety in Allergic Disorders—New Approach. To be published in Psychosomatics; [4]Cahn, B.: Experience with a New Tranquilizing Agent (Hydroxyphenamate). *Ibid;* [5]Alexander, L.: Effect of Hydroxyphenamate on Conditional Psychogalvanic Reflex in Man. Supplement to Diseases of the Nervous System, Sept., 1961; [6]Cahn, B.: Effect of Hydroxyphenamate in Treatment of Mild and Moderate Anxiety States. *Ibid;* [7]Cahn, M. M., and Levy, E. J.: Use of Hydroxyphenamate (Listica) in Dermatological Therapy. *Ibid;* [8]Davis, O. F.: On Use of Hydroxyphenamate in Anxiety Associated with Somatic Disease. *Ibid;* [9]Eisenberg, B. C.: Amelioration of Allergic Symptoms with a New Tranquilizer Drug (Listica). *Ibid;* [10]Friedman, A. P.: Pharmacological Approach to Treatment of Headache. *Ibid;* [11]Greenspan, E. B.: Use of Hydroxyphenamate in Some Forms of Cardiovascular Disease. *Ibid;* [12]Lunde, F., Davis, J., and Gouldmann, C.: Clinical Trial of Hydroxyphenamate in Alcoholic Patients. *Ibid;* [13]McLaughlin, B. E., Harris, J., and Ryan, F.: Double Blind Study Involving "Listica," Chlordiazepoxide, and "Placebo" as Adjunct to Supportive Psychotherapy in Psychiatric Clinic. *Ibid;* [14]Bastian, J. W.: Pharmacology and Toxicology of Hydroxyphenamate. *Ibid;* [15]Bossinger, C. D.: Chemistry of Hydroxyphenamate. *Ibid.*

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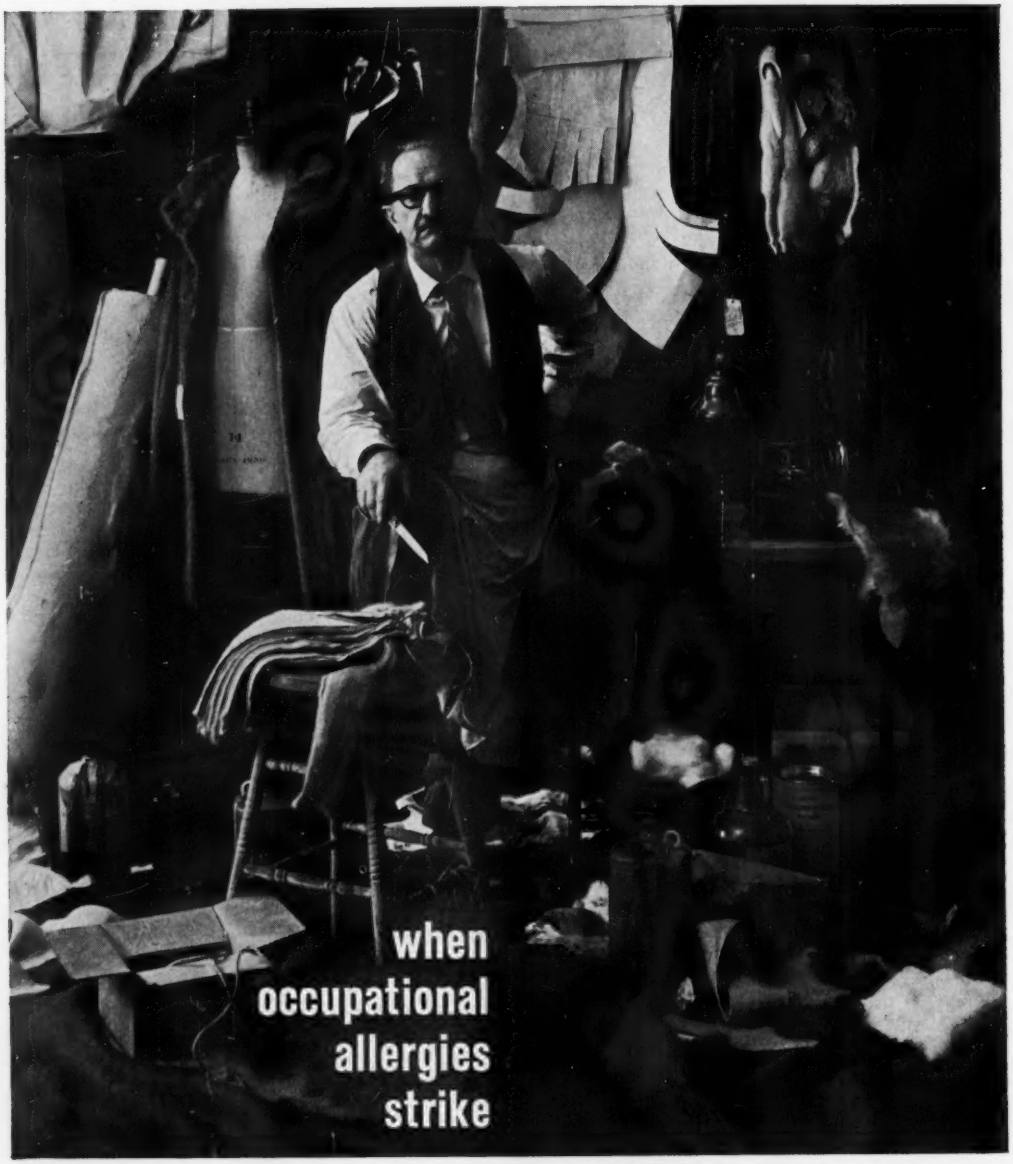
Physicians who prefer generic names prescribe "Hydroxyphenamate, Armour."

LISTICA—Hydroxyphenamate, Armour. *Stedman's Medical Dictionary



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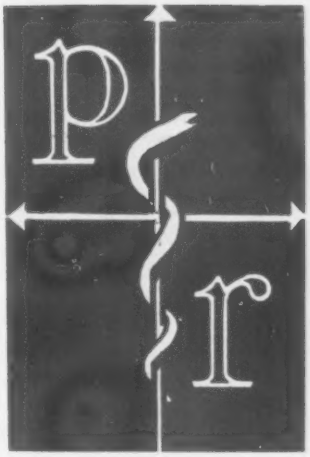
JMSMS

Medicine in Action

Programs Outlined at AMA Institute Chicago, August 31, September 1, 1961

By R. WALLACE TEED, M.D., *Chairman, MSMS Public Relations Committee*

(This is the first of several installments of Doctor Teed's report to The Council of MSMS)



The name of the meeting was changed this year to "AMA Institute," because it was intended to do more than to cover Public Relations materials. About half of the program was devoted to a presentation of AMA activities, in an attempt to "stir up, fire up, and wake up" its membership, according to AMA President Larson.

The program consisted of three main parts: (1) Public Relations Aspects of our battle for Independent Practice; (2) Activities of selected Medical Societies in working with the Community; (3) Activities of the various programs carried on by the AMA.

A number of exhibits were available, pointing up certain features of talks that were given. For example, the USPHS had an exhibit on "Medical Self-Help Training Program" which illustrated the talk of Dr. Caruth J. Wagner (Chief, Division of Health Mobilization, USPHS). It featured a kit containing a projector, film strip and pamphlets on Fallout, hygiene, sanitation, vermin, artificial respiration, etc., which can be used to teach American families how to survive a national emergency and to meet their own health needs. These kits and program will be available in late 1961 for the use of state and local societies. This seemed to be a valuable program, and one which MSMS could use.

Supplementing this was an AMA exhibit on Emergency Medical identification, including dog tags, bracelets, et cetera, on which may be placed warnings of sensitivity, blood type, diabetes, and other information.

An AMA exhibit on "Careers in Medicine," containing booklets and other materials could well be used in the MSMS Medical Recruitment drive.

* * *

ESPECIALLY INTERESTING was the AMA Department of International Health Exhibit, showing how affiliate memberships, text books and subscription to Journals were being offered to Medical Missionaries. For interns, Medical Missionary service could be substituted for Military Obligations, and furloughed missionaries could be offered continuing Medical Education. This exhibit illustrated a point in Dr. F. J. L. Blasingame's talk, in which he stated that we should share our talents with the rest of mankind and be good samaritans. Work of this type could be an effective refutation of the common image of the physician as a person interested only in making money. I would recommend this exhibit as a possible part of the MSMS educational program.

An exhibit on "Effective Grass Roots Materials" contained several pieces published by MSMS in showing what can be done by Medical Societies in molding public opinion. Other AMA exhibits included "Medico-Legal and Ethics Publications," "Councils in Medical Service Publications," "Communications Division," and "Teen-age Nutrition."

The Illinois Medical Society presented an exhibit featuring a tape recording of the work of the Society, and a box of pamphlets with an invitation for requests from the public.

I. THE BATTLE

I was impressed by the contribution of Rev. Robert Varley (Salisbury, Maryland) who asked: "Are we fighting a battle we can win?" He broke the problem down into four parts: (1) situation, (2) problem, (3) strategy, and (4) tactic.

The situation is the *cult of collectivism*, seeking through legislation to socialize American medicine, industry, labor, education, religion and social life. Medicine is a prime target because these planners believe its training and insight represent the greatest threat to these "idiot ideologists."

The problem is that the pseudo-social planners are attempting to erect a socialistic superstructure on a democratic base. Only as medicine sees the problem in its complexity can it mount full scale war against the enemy.

* * *

THE STRATEGY CONSISTS of being aware of our allies, those who can act as our "Intelligence Corps" and provide aid, both active and reserve. We must win those in government medicine, academic medicine, research, hospitals, pharmacy and nursing if we are to win.

We must work with our own hands, and assume the mantle of leadership which medicine has worn in the past.

His conclusion: With men of good will and common determination, we can win.

This was a forceful presentation and warrants reprinting for the guidance of all our members.

Prof. Wm. De Mougeot (North Texas State University, Denton, Texas) gave an excellent evaluation of the various arguments used against socialized medicine. His presentation is one of the most logical which I have heard, and I believe that it would be useful for a meeting such as the annual Public Relations-County Society Seminar of MSMS.

Doctor De Mougeot's suggestion regarding time payments is one which I believe MSMS could well investigate as a means of handling larger accounts. In this way, we could put our emphasis on helping to solve problems rather than denying they exist.

* * *

THE MOST INTERESTING FEATURE of the panel on "How to Counter Criticism," to me, was the presentation on buying newspaper space, by Dr. C. N. Hyatt (Chairman, Public Relations Committee, Iowa State Medical Society). He pointed out that we can improve our relations with newspapers by buying space to tell our story, since advertising is the lifeblood of the press. In addition, there would be no editorial alteration of the text.

The Wayne County (Iowa) Medical Society presented a series of articles on medical organization, care, policy, et cetera, and found that the series was successful and the cost relatively low. I believe that MSMS could profit by this type of presentation, and that it might be more helpful than a similar series via radio. I would recommend investigation of this activity, both on the state and local levels.

II. ACTIVITIES OF MEDICAL SOCIETIES

Robert Conger, the young, aggressive, enthusiastic President of the United States Junior Chamber of Commerce from Tulsa, Oklahoma, indicated that here we have another ally in our battle, and one which should be recognized on the community level. Their health program is (1) to find out what the problems are, (2) what facilities exist, and (3) how the problems may be solved. The program is divided into such subjects as accidental poisoning, alcoholism, care of the aging, family health maintenance, rehabilitation, voluntary health programs and immunization, all of which are of interest to us, and would aid in presenting a positive program to the community. I would recommend that MSMS take an active interest in this organization.

Dr. Frederick C. Swartz, of Lansing, gave a beautiful presentation of the Ingham County rehabilitation center at Sparrow Hospital, illustrated with slides, which was very well received.

Dr. H. D. Gardner, Director of Medical Civics Course, University of Louisville Medical School, described a course in "Medical Civics" which is quite similar to the MSMS course in Medical Economics and Ethics, which has been going on now for some twenty years. At Louisville, the course has now been integrated into the curriculum which is not the case here.

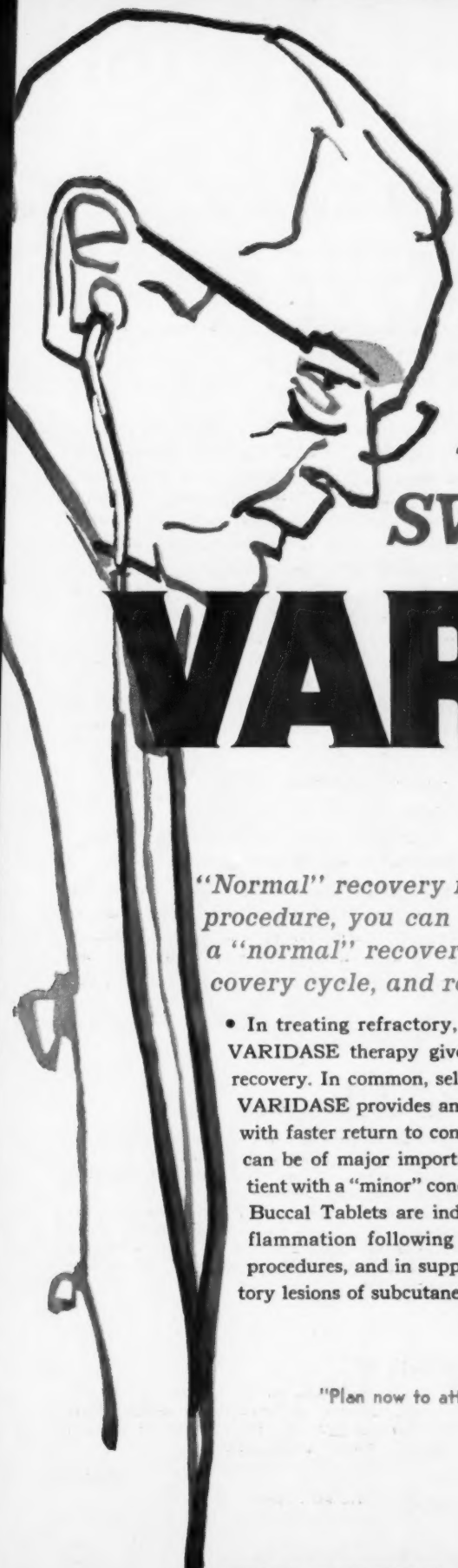
I would recommend that Dr. C. H. Ross, Ann Arbor, the present chairman of the committee handling the Michigan series, be suggested as a speaker for the AMA Institute next year.

The experience of the Pennsylvania Medical Society in dealing with labor has been so satisfactory, as detailed by Dr. W. B. Harer (Vice Chairman, Pennsylvania Medical Society Board of Trustees, that I would recommend that MSMS pursue a similar series of meetings with labor leaders in an attempt to clear away differences, and to find a common ground on which we can work for the benefit of the Community.

Dr. Harer made these suggestions:

1. Take the initiative in establishing contact.
2. Carry activities down to the grass-roots level.
3. Offer counter-proposals instead of rejecting their ideas.
4. Select Medical representatives carefully, attempt-

(Continued on Page 1264)



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• In treating refractory, chronic conditions, VARIDASE therapy gives added impetus to recovery. In common, self-limiting conditions, VARIDASE provides an easier convalescence with faster return to constructive living. This can be of major importance even to the patient with a "minor" condition. • VARIDASE Buccal Tablets are indicated to control inflammation following trauma or surgical procedures, and in suppurative or inflammatory lesions of subcutaneous and deep tissues.

• Precautions: VARIDASE has no adverse effect on normal blood clotting. Care should be taken in patients on anticoagulants or with a deficient coagulation mechanism. When infection is present, VARIDASE Buccal Tablets should be given in conjunction with antibiotics.

• Dosage: *One buccal tablet four times daily usually for five days. To facilitate absorption, patient should delay swallowing saliva.*

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LEDERLE LABORATORIES, a Division of AMERICAN CYANAMID COMPANY, Pearl River, New York

Medicine in Action

(Continued from Page 1262)

ing to have men who put aside pre-conceived ideas and be receptive to new thoughts.

5. Treat labor leaders as equals.

6. Don't expect to resolve all differences. Limitations must be recognized.

* * *

WORKING IN THIS WAY, THE PENNSYLVANIA MEDICAL SOCIETY and the Unions began to understand each other's goals, eliminated distrust, reduced opposition, developed cooperation, to tolerate each other, and to realize that both groups were interested in the health care of older people. I believe MSMS could profit in the same way.

Dr. C. S. Lewis, Jr., Tulsa, Oklahoma, spoke on an international health program carried out by Tulsa physicians in cooperation with some of the local churches. The group organized and collected a fund which made it possible for five local physicians to go to a Presbyterian Hospital in Miraj, India, for periods of six to eight weeks. Later, others plan to participate in this program which

1. Provides help where needed
2. Demonstrates Christianity in action
3. Demonstrates American concern for people
4. Exchange ideas with other people.

I might add that the Christian Medical Society has in the past year, also sent out nearly a dozen men to countries like Korea, Congo, and Central America, helping in its own way to share with others the blessings with which God has so richly endowed our country.

USPHS ATTITUDE TOWARD HEALTH SERVICES

. . . Significant changes have taken place in American attitudes, including the attitude toward health.

Increasing numbers of Americans today are demanding more security and, with this, more health services.

More and more Americans are willing to forego other satisfactions in favor of health insurance; good health is now regarded as another "inalienable right."—"Areawide Planning for Hospitals and Related Health Facilities." Report from U. S. Public Health Service.

BIRTH RATE UP

About 40,000 more babies were born in the U. S. in 1959 than in 1958, according to Public Health Service. There were 4,295,000 live births in 1959, of which 51 per cent were births of a first or second child.

When severe pain accompanies skeletal muscle spasm ease both 'pain & spasm'

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Supply: Bottles of 100 and 500 pink-and-white laminated tablets.

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Each ROBAXISAL-PH Tablet contains:
ROBAXIN (methocarbamol Robins) 400 mg. Acetylsalicylic acid .....81 mg.
Phenacetin 97 mg. Hyoscyamine sulfate 0.016 mg. Phenobarbital (1/8 gr.) 8.1 mg.
Supply: Bottles of 100 and 500 green-and-white laminated tablets.

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In the presence of bacterial infection, taking a culture to determine bacterial identity and sensitivity is desirable—but not always practical.

A rational clinical alternative is to launch therapy at once with Panalba, the antibiotic that provides the best odds for success.

Panalba is effective (in vitro) against 30 common pathogens, including the ubiquitous staph. Use of Panalba *from the outset* (even pending laboratory results) can gain precious hours of effective antibiotic treatment.

SUPPLIED: Capsules, each containing Panmycin* Phosphate (tetracycline phosphate complex), equivalent to 250 mg. tetracycline hydrochloride, and 125 mg. Albamycin,* as novobiocin sodium, in bottles of 16 and 100.

USUAL ADULT DOSAGE: 1 or 2 capsules 3 or 4 times a day.

SIDE EFFECTS: Panmycin Phosphate has a very low order of toxicity comparable to that of the other tetracyclines and is well tolerated clinically. Side reactions to therapeutic use are infrequent and consist principally of mild nausea and abdominal cramps.

Albamycin also has a relatively low order of toxicity. In a certain few patients, a yellow pigment has been found in the plasma. This pigment, apparently a metabolic by-product of the drug, is not necessarily associated with abnormal liver function tests or liver enlargement.

Urticaria and maculopapular dermatitis, and a few cases of leukopenia have been reported in patients treated with Albamycin. These side effects usually disappear upon discontinuance of the drug.

CAUTION: Since the use of any antibiotic may result in overgrowth of nonsusceptible organisms, constant observation of the patient is essential. If new infections appear during therapy, appropriate measures should be taken. Total and differential blood counts should be made routinely during prolonged administration of Albamycin. The possibility of liver damage should be considered if a yellow pigment, a metabolic by-product of Albamycin, appears in the plasma. Panalba should be discontinued if allergic reactions that are not readily controlled by antihistaminic agents develop.

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Panalba
your broad-spectrum antibiotic of first resort.

Upjohn

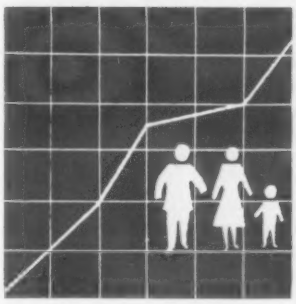
The Upjohn Company
Kalamazoo, Michigan

Average Annual Health Costs Reported at $539

For some 12 million persons who itemized expenditures on their 1958 Federal income tax returns, their average medical and dental expenses were $539, according to an analysis by Health Insurance Institute. The average health expense deduction was about $330.

The average expense figure of $539 would include premium payments for health insurance policies, drugs and other medicines, hospital charges and physicians' and dentists' fees.

Persons who earn more spend more for health care services and products, the returns indicate. Average expenditures of $523 were reported by taxpayers in the $5,000-$8,000 income bracket, and $862 in the $10,000-$15,000 bracket.



Accredited Hospitals Serve 83 Per Cent of Hospital Patients

Eighty-three per cent of all hospital admissions are to hospitals accredited by the Joint Commission on Accreditation of Hospitals, according to the annual guide issue of *Hospitals*, journal of the American Hospital Association.

The tabulation shows that while only 54.4 per cent of all hospitals are accredited, such hospitals account for:

Some 85.7 per cent of all hospital births; 61.7 per cent of all beds; 60.5 per cent of the average daily number of patients; 80.7 per cent of all hospital employment; 81.8 per cent of total expense for operation of all hospitals; and 78 per cent of all hospital assets.

Sees "Mother Hen" Replacing the Eagle

Americans have substituted the image of a mother hen for the American eagle. Washington today constitutes the biggest employer, the biggest manager, the biggest consumer, the biggest stockholder and the biggest property owner. . . . If the present trend continues, the federal government itself will become the biggest threat to America's eminently successful free enterprise system.

—HAROLD W. HANDLEY,
Governor of Indiana

AHA Proposal to Congress

The American Hospital Association has made a flat offer to Congress to administer the Kennedy Administration's proposed medical-care-for-the-aged program at state level through existing Blue Cross plans, provided the Federal Government keeps hands off such Blue Cross administration.

Otherwise, said AHA president Frank S. Groner of Memphis, Tenn., who made the offer, AHA must oppose the bill on the grounds that "government as purchaser of so much hospital care would exert the power of purse in ways detrimental to the interests of hospital patients."

Quarterly Blue Shield Payments Set Mark

The nationwide Blue Shield Plans paid out more than $206,000,000 for surgical-medical care rendered to members during the first three months of 1961. The National Association of Blue Shield Plans reports the $206,321,765 paid to the medical profession represented a record high for a three-month period.

The national association also indicated payments to the medical profession over the past decade had increased from approximately $165,000,000 in 1951 to the 1960 figure of $731,131,187.

Blue Plans Serve Millionth Federal Employee

The one millionth government employee has picked Blue Cross-Blue Shield under the Federal Employees Health Benefit Plan.

Government employees comprise the biggest group in the world with a common employer protecting themselves against the cost of hospital and medical care.

Blue Cross-Blue Shield with at least 54 per cent of the government workers enrolled, has more than the other 37 plans combined.

In Michigan the figure is even higher. Some 61 per cent of federal employees have chosen Blue Cross-Blue Shield; 13.5 per cent have picked the Aetna commercial insurance plan and a little over 25 per cent are enrolled under employee organization plans.

Walter J. McNerney, president of the Blue Cross Association, and Dr. William Howard, president of the National Association of Blue Shield Plans, both point out that a unique feature of the federal Civil Service Commission is offering employees a wide choice of 38 programs, with the decision entirely up to them.

Says Conferences at Resorts Won't Preclude Deductions

Commissioner of Internal Revenue Mortimer M. Caplin recently denied that legitimate expense deductions for conventions and business meetings are being disallowed because the business activity takes place at a resort area.

The Commissioner had received information that businessmen, associations and other groups were concerned as to whether, under existing law, legitimate expense deductions, particularly those for conventions or business meetings, are being disallowed because the business activity takes place at resorts.

There is no reason for such concern, the Commissioner said in reiterating IRS policy in this area. He added: "While it is true that we have intensified our audit activity in the travel and entertainment expense area, there has been no change in the concept of what constitutes a deductible expense. Those expenses which are clearly shown to be for business purposes will continue to be allowable under existing law."

Disallowances, he said, are properly made to eliminate wives' and children's expenses, expenses of side trips, vacations purported to be business trips, and for lack of substantiation of expenses incurred.

When it's more like "grippe" or

"flu" than a simple cold, but an antibiotic is not indicated... prescribe NEW WIN-CODIN* Tablets

New Win-Codin tablets provide greater symptomatic relief from influenza, colds and sinusitis than do simple analgesic-antihistamine combinations. New Win-Codin tablets contain a full complement of the most effective agents available to relieve general discomfort, bring down fever and lessen congestive symptoms.

Each tablet contains:

Codeine phosphate 15 mg.—to relieve local and generalized pain and control dry cough

Neo-Synephrine® 10 mg.—to shrink nasal membranes and open sinus ostia

Acetylsalicyclic acid 300 mg. (5 grains)—to reduce fever and relieve aching

Chlorpheniramine maleate 2 mg.—an antihistamine to shrink engorged membranes and lessen rhinorrhea

Ascorbic acid (vitamin C) 50 mg.—to increase resistance to infections†

New Win-Codin tablets will bring more comfort to many patients suffering from severe colds, influenza or sinusitis.

Average dose: Adults, 1 or 2 tablets three times daily; children 6 to 12 years, from ½ to 1 tablet three times daily.

Available in bottles of 100 (Class B narcotic).

Winthrop LABORATORIES
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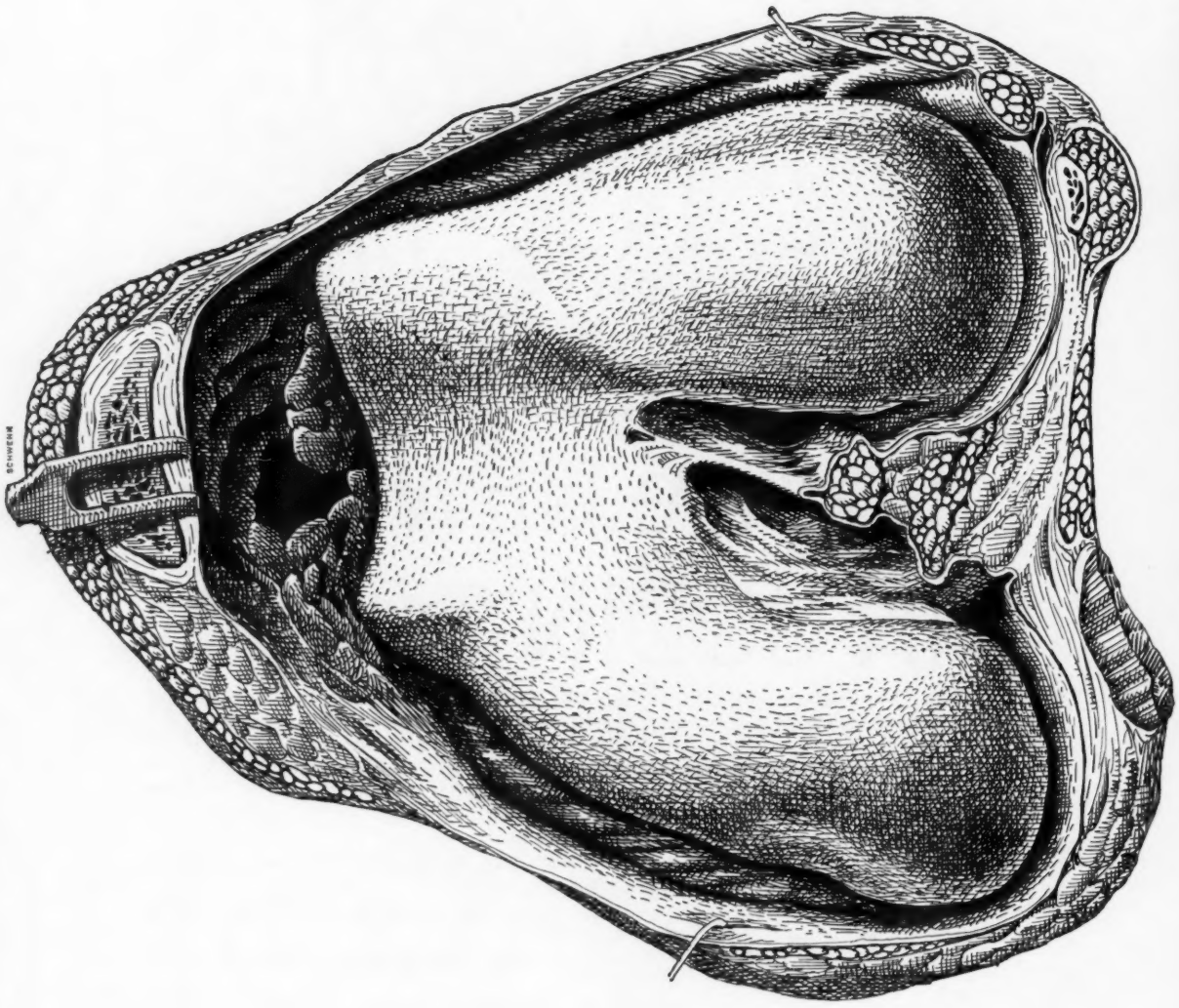
*Trademark †For persons with vitamin C deficiency
Neo-Synephrine (brand of phenylephrine), trademark reg. U. S. Pat. Off.



because patients are more than arthritic joints... controlling inflammatory symptoms is frequently not enough!

Even cortisone, with its severe hormonal reactions, can effectively control inflammatory and rheumatoid symptoms. But a patient is more than the sum of his parts – and the joint is only part of a whole patient. Symptomatic control is but one aspect of modern corticotherapy, because what is good for the symptom may also be bad for the patient.

Unsurpassed "General Purpose" and "Special Purpose" Corticosteroid...
Outstanding for Short- and Long-term Therapy

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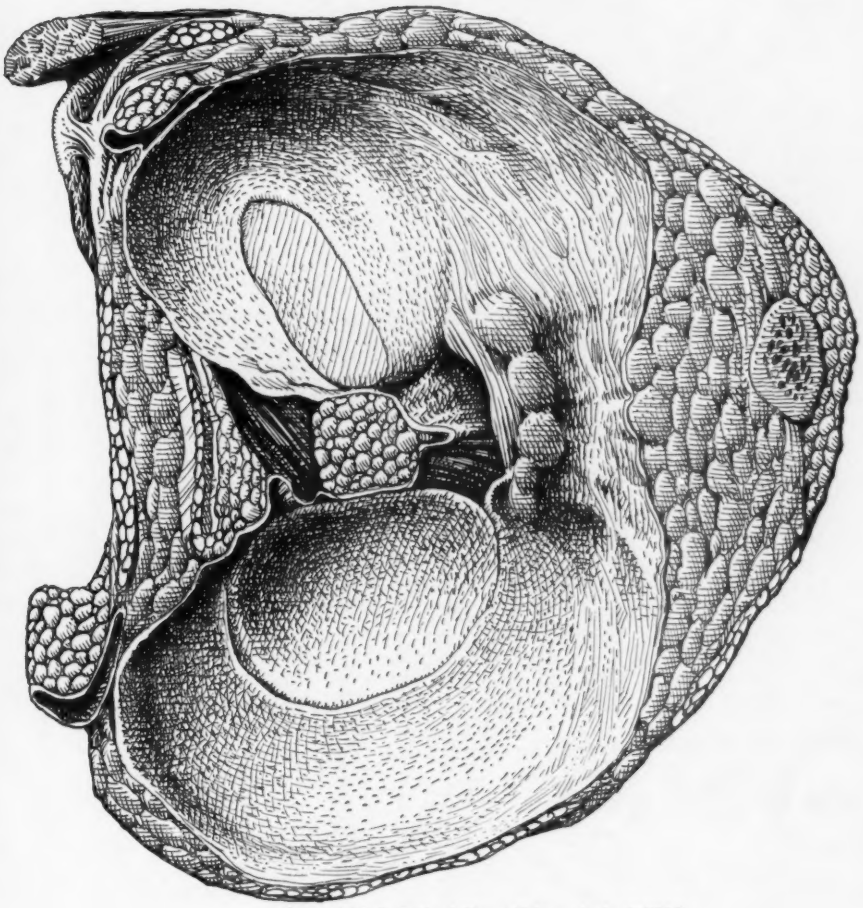

(Knee Joint, Left: distal end of femur; Right: proximal end of tibia)

ARISTOCORT is an outstanding "special purpose" steroid when the complicating problem is increased appetite and weight gain, sodium retention and edema, cardiac disease, hypertension or emotional disturbance and insomnia.

ARISTOCORT provides unsurpassed anti-inflammatory control without sodium retention or edema — without the undesirable psychic stimulation and voracious appetite.

Supplied: Scored tablets (three strengths), syrup, parenteral and various topical forms. Request complete information on indications, dosage, precautions and contraindications from your Lederle representative, or write to Medical Advisory Department.

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CONSISTENTLY SUCCESSFUL IN RELIEVING DRY, ITCHY SKIN

Sardo® BATH OIL

STUDY 1 *Spoor, H. J.: N. Y. State J.M. 58:3292, 1958.*

satisfactory results in 88% of cases

comments: "In practically every instance... the patients experienced relief from dryness and pruritus."

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senile pruritus
contact dermatitis
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neurodermatitis
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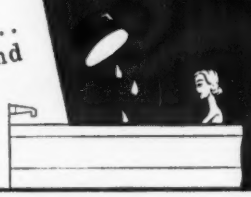

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Milpath acts quickly to suppress hypermotility, hypersecretion, pain and spasm, and to allay anxiety and tension with minimal side effects.

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MILPATH-400—Yellow, scored tablets of 400 mg. Miltown (meprobamate) and 25 mg. tridihexethyl chloride.
Bottle of 50.

Dosage: 1 tablet t.i.d. at mealtime and 2 at bedtime.

MILPATH-200—Yellow, coated tablets of 200 mg. Miltown (meprobamate) and 25 mg. tridihexethyl chloride.
Bottle of 50.

Dosage: 1 or 2 tablets t.i.d. at mealtime and 2 at bedtime.

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®Miltown + *anticholinergic*

WALLACE LABORATORIES *Cranbury, N. J.*

without steroids this arthritic miner might still be spoon-fed

On METICORTEN, he has worked steadily for six years with no serious side effects

J. G.'s rheumatoid arthritis started in 1949 with severe and unremitting pain in his shoulders. Later, his wrists, elbows, feet and hands became involved with swelling and loss of function. By 1951, when he was 45, the patient was helpless and had to be fed and dressed by his wife. He was frequently hospitalized during the next three years. Hydrocortisone failed to make any change in his condition.

On April 2, 1955, the patient was placed on METICORTEN and improved promptly. Two weeks later he stated, "I feel very well now." He was able to go back to work as a mine electrician that year and had no difficulty driving a car.

For the past six years, he has been maintained on METICORTEN 5 mg. two or three times a day. There have been no side effects. The patient has not lost any work time, nor has he had to limit his activities in any way.

Case history courtesy of Joel Goldman, M.D., Johnstown, Pa.
These photographs of Dr. Goldman's patient were taken on November 10, 1960.
METICORTEN,® brand of prednisone.

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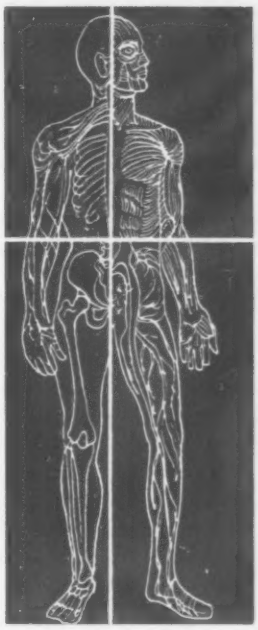
S-783

A Geriatrics Committee at Work

Willis W. Atwell
Grand Rapids, Michigan

THE WHITE HOUSE CONFERENCE, and the regional preparatory meetings such as the one held in Lansing, devoted considerable time to a search for a pattern of community organization which would focus on the aging segment of population explosion. Evolution of such a community organization in Grand Rapids and Kent County began with programs and studies by the University of Michigan's Division of Gerontology in 1949-1952, with the full cooperation of the Council of Social Agencies. Exploration as a Council committee continued slowly until a plan was evolved and finances secured from the Junior League and W. K. Kellogg Foundation for an experimental community program. In February 1959, The Coordinating Council for the Aging of Grand Rapids and Kent County began an action program with a full Board of Directors and an executive.



The Board is representative of the elements of the community essential to a coordinating program. Participating are representatives of the Junior League, business, industry, labor, major religious groups, the legal and medical professions and the directors of the health and welfare departments. It is with the participation of the medical profession that this report is concerned.

There was agreement that any community organization of services for older people must be tied closely with the Geriatrics Committee of the Kent County Medical Society, if the program was to be meaningful and soundly geared to the needs of the people it should serve. Kent County's Coordinating Council for the Aging with this cooperation has built a program based on this premise.

One of the Council's projects was the compilation of a directory of services, and arrangements were immediately made by the chairman of the Geriatrics Committee to have it sent by the Medical Society to each member. Similarly, the Geriatrics Committee has kept the Council's program and projects before the Society's membership through regular reports in the JOURNAL and at meetings.

This inter-play of organizations has also proved effective in training programs. Members of the Geriatrics Committee served as resource people in the training program for volunteers to work in nursing homes in a diversional therapy project. Working with the Coordinating Council, in addition to the Geriatrics Committee, were the Junior League, Welfare Department, nursing homes, Health Department, and the local chapter of the National Association of Social Workers. The diversional therapy experiment proved of value and it is expected the Federation of Women's Clubs will carry on with it this fall. Through the offices of the Geriatrics Committee all nursing home patients were cleared for approval with their own physicians

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Mr. Atwell is Executive Director of the Coordinating Council for the Aging of Grand Rapids and Kent County.

before the volunteers worked with them.

Another training program in which the Geriatrics Committee participated has been in training of home aides to care for elderly ill or disabled persons in the patients' own homes. After cooperating in the planning of this project, the Committee furnished members to cover the relationship of the home aide to the doctor, the psychological aspects of old age, and the use of simple rehabilitative exercises under a doctor's orders. In addition, home aides were given the Red Cross "care of the sick and injured" course, instructed how to use the Fire and Police Departments in emergencies, exposed to diversional therapy by an occupational therapist, given safety instruction by the Safety Council, were made acquainted with Health Department services, given an intensive course in food preparation and home management, and shown available community resources. As a result of two classes, there are now twenty-five trained home aides on the job.

Second only to health matters in the Coordinating Council's concern has been housing. Here, too, the Geriatrics Committee has been helpful. In working with the Milner Hotels, Inc., on the establishment of a low-cost residence for older people, as a combined effort of private enterprise and community services, the Committee was helpful in working out a physician call system so that ill residents might get immediate attention. Members of the Committee are also working with the Council on a "health center" in the hotel to be staffed by volunteer registered nurses. This offers a place for examinations to be made. Because of the Committee's interest, it has been possible to use this as a facility for the return of rehabilitated older people to community life under minimum supervision, but with planned activities. Among the groups furnishing volunteers in the recreational program is the Medical Society Auxiliary. By the way, room and meals in this renovated structure, where each room has its own bath, totals $86 per month.

In another hotel conversion (the Manger-Rowe), with which The Council is cooperating, members of the County Society are cooperating in furnishing a health report on the potential residents, since this is to be a facility for the well older person.

Close cooperation between The Council, Geriatrics Committee, County Society, and Health Council resulted in a grant of $10,000 from the Grand Rapids Foundation for a study of convalescence, chronic illness and rehabilitation, administered by the planning division of United Community Services. The study completed last fall by A. J. J. Rourke, M.D., of New Rochelle, New York, is in the hands of an implementation committee on which the Coordinating Council is represented by a member of Geriatrics Committee.

Similarly, the Coordinating Council, Geriatrics Committee, Health Department, Welfare Department and Michigan State Health Department cooperated in the adult screening project described in detail in this issue. The same organizations also cooperated in a study of possible further improvement of nursing-home care and a program recommending establishment of restorative techniques based on an in-service training program. This, coupled with increased nursing home fees, was adopted on the local level. To date, funds for the base budget have not been secured.

Ever since the University of Michigan's Division of Gerontology made its initial studies in Grand Rapids in 1952-1953, there has been an annual Senior Skills Show in which older people exhibited their handiwork. Attendance has been good and it appeared to present an opportunity to do some educational work. Therefore, last year with the assistance of the Geriatrics Committee, a Health Fair was added. Included were most of the major voluntary health organizations with a message for older people, plus an animated exhibit placed by the Medical Society.

As might be expected, some programs do not directly involve the Geriatrics Committee, but the Committee has been enthusiastic in its support of those programs offering activities to older people for any therapeutic by-products there might be. Some of these have been the registration for voting of shut-ins prior to the presidential elections last fall; extension of the Recreation Department's decentralized program into unserved areas by organizing groups; publishing a weekly calendar of events of interest to older people in the newspaper and presenting a weekly radio program for older people; initiating an information, referral and counseling service; and offering assistance to people with problems encountered as the result of being displaced by the inter-regional highway program, as well as working with urban renewal on relocation problems.

These programs have been developed during the past two and one-half years and have required the combined efforts of many to make them possible, but such an active program in such a short time would not have been possible without the cooperation and backing of the Geratrics Committee of the Kent County Medical Society, under the chairmanship for two years of Ralph L. Fitts, M.D., and now headed by Michael E. Ellis, M.D. Grand Rapids' older people can truly thank the doctors on the Committee for many of the services they now enjoy.

Medical Evaluation of 100 Welfare Applicants Between the Ages of Sixty and Seventy

Winston B. Prothro, M.D., F.A.C.P.M.
Warren B. Mason, M.D.
Grand Rapids, Michigan

SEVERAL YEARS AGO, the problem of illness in the indigent elderly population was discussed by various interested groups on a State level. It was proposed that all applicants for public funds should have a complete physical examination with the underlying thought that illness alone might have caused the need for public aid. Proper care, therefore, might reduce the welfare expense. This apparently was attempted on a minor scale in one other Michigan city but was unsuccessful. More recently, attention has been focused by both professional and lay groups on the medical care of elderly citizens and interest has again entered in this problem of evaluation of the medical status of elderly indigent patients. This question was discussed in the Coordinating Council for the Aging of Grand Rapids and Kent County by various members of this group, including representatives of City and County Health Departments, the Kent County Medical Society and Dental Societies. After discussion of the aims and need for such a study, and when funds were made available through several agencies, this study was instituted in the City of Grand Rapids.

The original purpose set forth was to determine the number, type, and severity of physical deviations in a sample group of *apparently well* public assistance applicants. This study was also to serve as a means of exploring the practicability of screening programs to discover disease and prevent complications. Finally it was to provide information relating to socio-economic problems related to chronic disease detection, prevention and control.

We chose to examine 100 people between the ages of sixty and seventy who applied to the Kent County Department of Social Welfare for public assistance. In order to find enough candidates, the records were utilized from April 1959 to September 1960. Sixty-six applicants were women and thirty-six were men. Seventy-one were white and twenty-nine non-white. Thirty-four had no physician and were unable to give a physician's name for reference. Table I shows the various categories of welfare applicants. It is interesting that, in spite of assurance about the motives of this survey and that the examination would not jeopardize the welfare application, less than one-half of the people of a total 249 were willing to take part in the examination. (I should add that the most common reason given was that they felt they had adequate care by their own physician.) The inability to take consecutive cases will add some bias to our findings. The exclusion of homebound and nursing-home patients will certainly reduce the number of serious illnesses. However, the original intent of this survey was to examine apparently well applicants. The money utilized in this survey was made available through the State Health Department from Federal grants-in-aid funds to the County Health Departments and additional aid was received from the American Cancer Society and the local branch of the State Laboratory.

TABLE I. CATEGORIES OF WELFARE APPLICANTS

Old Age Assistance	
Applications from April 1, 1959 to September 30, 1960	783
Ineligible because of age or health status	575
Possible contacts for physical exams	208
Contacted but not interested	127
Physicals completed	81
Direct Relief	
Applications from September 1, 1959 to August 31, 1960	67
Ineligible because of age or health status	26
Possible contacts for physical exams	41
Not interested	22
Physicals completed	19

Method

The examination was made in the medical facilities of the Tuberculosis Clinic of the Grand Rapids Kent County Health Departments. The nurse supervisor, x-ray technician, medical aide and public health nurses

Doctor Prothro is Director of the Grand Rapids and Kent County Health Department.

TABLE II. DISEASES

	Known	Unknown
Heart and Vessels		
Labile Hypertension		2
Hypertensive Vascular Disease	5	10
Hypertensive Cardiovascular Disease	13	7
Hypertensive Arteriosclerotic Heart Disease	5	7
Arteriosclerotic Heart Disease	4	12
Angina	3	7
Cor Pulmonale		1
Rheumatic Heart Disease	2	
Syphilitic Heart Disease		1
Myocardial Aneurysm (EKG)		1
Auricular Fibrillation		1
Congestive Heart Failure	5	1
Organic Heart Disease Type undetermined		1
Generalized Arteriosclerosis		2
Arteriosclerotic Retinopathy	1	1
Arteriosclerotic Peripheral Vascular Disease		3
Leriche Syndrome		1
Postural Hypotension	1	
Intermittant Claudication		1
Possible Aortic Aneurysm		2
Metabolic		
Gout		2
Malnutrition	1	1
Diabetes Mellitus	9	14
Elevated two-hr. postprandial blood sugar >130		14
Diabetic Complications	2	
Nontoxic Nodular Goiter		2
Thyroid Adenoma		5
Colloid Goiter		1
Hyperthyroidism		3
Hypothyroidism		1
Hypocholesterolemia (Probable)	1	2
Question of Cushings Syndrome		1
Question of Hypoventilation Syndrome		1
Pulmonary		
Senile Emphysema	4	11
Chronic Bronchitis	4	4
Bronchial Asthma	1	
Bronchiectasis		2
Fibrocalcific Disease—x-ray findings		2
Density in Lung—x-ray findings		2
Old Tuberculosis	3	
Possible Cancer of Lung		2
Eye-Ear-Nose		
Increased Intra-ocular pressure (greater than 24.4)		13
Glaucoma	1	1
Cataract	3	2
Corneal Scar	2	
Blindness	2	
Decreased Visual Acuity	2	
Ectropion	1	
Eye Injury	1	
Vitreous Opacities		1
Impaired Hearing	8	
Menieres Disease		1
Vasomotor Rhinitis	1	
Leukoplakia (Mouth)		1
Blood		
Anemia	2	5
Polycythemia		3
False Positive Serology		1
Weakly Reactive Serology		2
Late Latent Syphilis	2	
Reactive Kahn		2
Neurologic		
Peripheral Neuritis		2
Probable Mental Disease	1	5
Chronic Anxiety	3	
Old Hemiparesis	2	
Probable CNS Lues		2
Possible Spinal Cord Tumor		1
Miscellaneous		
Varicose Veins	14	
Dental Caries (Severe)	9	
Breast Mass	1	1
Splenomegally		1
Bone and Joint		
Osteoarthritis		
Generalized	5	
Lumbosacral spine	14	3
Cervical Spine	9	
Shoulders	4	
Knees	16	1
Hands	7	
Fracture Deformity Leg	1	
Gibbus Deformity of Spine	1	
Osteomyelitis-Skull		1
Charcot Joint		1
Pulmonary Osteoarthroperthy (?)		1
Knee Injury (? Lat. Ligament)	1	
Probable Compression Fracture (T 9-10)		1
Genito Urinary		
Cystocele	12	13
Rectocele	2	4
Stress Incontinence	8	
Uterine Descensus		1
Uterine Fibroids		3
Vaginal Stenosis		1
Pruritus Vulvae	1	
Labial Cyst	1	
Urethral Stricture		1
Benign Prostatic Hypertrophy		5
Prostatitis		1
Scrotal Mass (Incl. Testicular)	1	2
Cancer of Cervix		1
Trichomonas Vaginitis		1
Cervix Erosion		1
Cervix Polyp		1
Arteriolonephrosclerosis		1
Pelvic Mass		2
Skin		
Senile Keratoses (? Malignant)	1	1
Erythema Multiforme	1	
Infected Callous (foot) in Diabetic	1	
Intertrige	1	
Housewife's Dermatitis	1	
Gastrointestinal		
Obesity	28	
Irritable Colon	9	1
Gastritis	1	
Cholecystitis and/or Cholelithiasis	2	
Gastrointestinal Complaints	4	
Possible GI Malignancy		3
Diverticulosis	1	
Anal Stenosis	1	
Hemorrhoids	8	2
Alcoholism	1	
Hernia		
Ventral	3	1
Incisional	1	
Inguinal	2	1
Submandibular Mass (Probable Salivary)	2	
Probable Cholecystitis and/or Cholelithiasis		7
Possible Ulcerative Colitis		1

who are regular personnel of this Clinic were utilized in their various capacities for the examination. Numerous forms, tabulation sheets, follow-up letters (including letters of information to the local physicians) were prepared through the clinic, and the records of the survey were kept in this office.

The examination consisted of the following: medical and social history by the social worker and the examining physician; complete dental survey by the members of the Kent County Dental Association; complete physical examination including optic tonometry, rectal and pelvic examination. Laboratory work consisted of the following: chest x-ray, electrocardiogram, tuberculin skin test, Kahn test, cervical cytology (through the American Cancer Society), hemoglobin, two-hour postprandial blood sugar urinalysis (without microscopic), and stool guaiac.

Findings

It is best to have in mind that this type of examination should be compared to the first visit of any patient to a physician for a complete physical examination and preliminary laboratory work. One can realize then that many positive diagnoses could be made at the end of the first visit, the rest were tentative diagnoses and could be substantiated only through further laboratory work and follow-up studies which were not part of this survey We were forced to list some diseases, therefore, as probably serious conditions and in need of further investigation. This type of survey would naturally be weighted toward those diagnoses which can be made by inspection and simple laboratory procedures. Table II lists these diseases.

Discussion

The number of serious diseases in this age group is quite striking. Certainly this is a select group and already biased by several factors previously outlined. Of the sixty-six women, there were two positive cervical cytology tests, one of which was negative on two or three repeat examinations; the other patient had a positive cervical biopsy and has since had a hysterectomy. There were fourteen unknown diabetic patients and fourteen other patients with a two-hour blood sugar elevation greater than 130 mg. per cent. This, of course, is not diagnostic of diabetes but would suggest further study. Disregarding non-specific T-wave changes, there were forty-six abnormal electrocardiograms. Obesity and hypertension were two common abnormalities and are good examples of the type of diagnosis which can be made with some certainty on the first examination. There were many patients with suspected gastrointestinal abnormalities, even malignancies. No rectal carcinomas were found and it is somewhat surprising that in this age group there were no obvious skin cancers and very little difficulty with prostatitis or carcinoma of the prostate was noted. Only six patients were thought to be in excellent health.

TABLE III. ELECTROCARDIOGRAPHIC FINDINGS

Left Ventricular Hypertrophy	7
Left Ventricular Hypertrophy with Ischemia	5
Old Anteroseptal Infarct	5
Old Anterior Infarct	2
Anterior Wall Ischemia	6
Old Subendocardial Infarct	1
Probable Old Posterior	3
Posterior Wall Ischemia	4
First Degree Heart Block	4
Complete Right Bundle Branch Block	3
Complete Left Bundle Branch Block	2
Auricular Fibrillation	2
Myocardial Aneurysm	1

We have been unable to find any similar studies with which to compare our results. As has already been suggested, it is difficult to determine what diseases are known and unknown and furthermore we were left with a category of suspected serious disease that could not be placed under any particular category. We discovered 238 diseases not previously known to patients and confirmed 270 known diseases. This would seem at first to be an indictment of the medical profession and the medical care these patients have received. However, the majority of these patients considered themselves well and had not required recent medical care. It is also interesting to note the similarity of findings in this group of public assistance applicants to a more thorough study by the University of Michigan on their faculty members covering a wider age range in a much higher economic bracket.[1,2]

There was some controversy throughout this entire study as to how we could answer the questions set forth in the original purpose. We did determine the numbers and types of abnormalities up to a certain point, but many of the diagnoses were only tentative. We did show that a study of this sort could be carried out on a voluntary basis with some welfare applicants. We could not make the absolute assumption that it would be valuable to compel all welfare applicants to have such an examination. We were able to make some assumptions about the prevention and control of chronic disease in this age group. There is no doubt that proper therapy, even at this age, of many of these diseases could easily save prolonged periods of mor-

bidity and reduce the mortality for certain diseases in this group. It is impossible to estimate in any way the money that a county might save through the proper treatment of hypertension and the prevention of even one stroke. It is possible that public funds saved in this way could finance the preventive medicine program.

TABLE IV. FOLLOW-UP OF 100 PATIENTS

Patients regarded as having only minor illinesses not requiring intensive care	29
Patients needing follow-up who had contacted own physician	36
Patients who did not return to physician but were seen by visiting nurse	35
Returned for care after nurses visit	16
Urged to return—but results not known	6
Felt no need for medical care	6
Not located	6
Died	1

After the examination, we made no attempt to counsel the patient. Some obvious serious illnesses requiring immediate care were urged through the Welfare Department. A summary letter of the findings, including a tentative diagnosis, was sent to the family physician or welfare physician in all instances and the patient was urged to contact these doctors for their follow-up care. A follow-up letter was sent to each of the physicians and some contact attempted with each of the patients to determine if they were under proper care. Many of these people were not seeking medical attention because they did not feel it important, others because they did not suspect any disease; some felt they could not afford it and were unaware of some of the ways open to them to get care through local hospitals or welfare. We are attempting to do a careful follow-up over a period of one year and plan to report this at a later date. Results are shown in Table IV.

An interesting suggestion regarding further surveys of this sort has been made by a member of the evaluation committee; that a similar study of the same number of patients in this age group be carried out using only technicians to do all the various mechanical parts of the history and laboratory studies, with the physician passing only the final judgment on the collected data in order to reduce the cost and time involved. Of course, this would reduce such a survey to a case-finding system in an effort to pick out serious disease only and help secure immediate care in order to reduce the future cost. However, this approach would rob these patients of a real preventive medicine approach and perhaps mislead them as to their health status.

Conclusions

1. A complete physical examination with detailed history and screening laboratory work was carried out on 100 welfare applicants in the 60-70 year age group.
2. There is a large reservoir of known and unknown disease in this group.
3. The numbers and types of disease in this group seem comparable to those found in similar age group at higher economic levels.
4. Although it is difficult to estimate by any parameter, it can be surmised that proper treatment even at this stage could prevent some complications of the diseases found and thereby decrease morbidity and mortality in this group.
5. Without complete follow-up including appropriate studies, there is no doubt that other serious diseases including malignancies were present in this group but not detected.
6. One of the problems in our society today is to try to carry out similar examinations on all citizens with the same degree of completeness and at as low as possible cost.

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Find Tuberculosis Decline

A steady 10-year decline in the number of new cases of active tuberculosis discovered among Veterans Administration patients admitted for treatment of other diseases has been reported by the Veterans Administration.

The rate in the Veterans Administration tuberculosis case-finding program, which excludes hospital patients admitted for tuberculosis, has declined from 58 per 10,000 in 1950 to 10 per 10,000 in 1960.

The Challenge of Aging

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IN SOME CIRCLES, too much attention has been directed toward the so-called difficulties and hardships of aging when, in reality, more attention should be focused on the opportunities and responsibilities in aging—or what might be called "the challenge of aging."

The majority of persons grow old rather gracefully. They take care of their own affairs, do their work, pay their taxes, have a certain amount of recreation and enter into various community activities as time, health and inclination permit.

The way to grow old most gracefully is to continue working as long as health permits and generally this can be maintained for a long time through good medical counseling.

If retirement becomes a reality (either compulsory or voluntary), the retiree should continue to keep active mentally or physically or both. Reading, studying, writing and speaking about a wide variety of subjects are open to any citizen who might apply himself. Vegetable and flower gardening, lawn care, painting and minor repairs around the house should keep a retired person rather busy much of the time.

I am a practicing physician first of all but I study and write and speak about anthropology, archaeology, ancient man, North American Indians, Chinese art, philosophy, radioactivity, and aging to keep from getting old.

One of the reasons for writing this paper is to seize the opportunity to meet the challenge of aging personally in a forthright manner by writing about it, pointing out some of the pitfalls that may trap the unwary and indicating some methods whereby the later years may be productive, fruitful, eventful, interesting and meaningful to myself while contributing something to my fellow man.

Youthful attitudes presage a person's approach to aging. Those who live an active life and find an interest in everything around them, can face the future with composure. Those who have been indolent have a limited horizon. As the years roll by and a person becomes less far-reaching in his activities, there should be a continual awareness of current events both at home and in world news.

The productive working years must also be the productive thinking years. If we do not try to broaden our knowledge, experience and interests, we cannot hope to grow old gracefully. A rewarding life is one in which an individual has experienced many things and learned something from each encounter. The formative years of youth must be inquisitive years of learning, training and re-learning as knowledge changes to furnish a background for the later years. All the things learned in a long, busy, productive life should be carried over into the less productive years. Youth has verve but age has dignity and serenity.

Old ties should not be broken thoughtlessly. Moving to Florida or California and thereby separating from old friends is a bid for dissappointment and loneliness. Remaining in the old environment seems more desirable, except for cause such as asthma, arthritis, coronary disease or a group of friends moving to a colony in a warmer climate. We can take up new interests, study new subjects, help others to help themselves toward a better approach to an interesting life, and undertake some of the things we have been promising ourselves to do when we had time.

If a person is occupied at least part of the time with some purposeful activity, subsequent leisure will be more appreciated and have more value. Rest has little to offer unless preceded by a little work. Painting, sketching, golf, poetry, or fictional or factual magazine articles might be called fun time or leisure-time work.

If money is a factor, many small services can be performed: companion, telephone answering, tutoring school children, sewing, typing and temporary care of children. If money is not a problem, there are many volunteer services: Red Cross; social, church and political organizations; reading to blind or sick persons—to name a few.

Rambling references to the past generally should be avoided except that one should be willing to discuss past events with those who shared them or with

really interested persons. A concern with good grooming helps to keep one active.

The Cycle of Life

The natural sequence of life is cyclic. All living things follow a general pattern of coming into existence, a stage of immaturity, a period of maturity, a time of decline and then passing out of existence. The sequence of aging is inevitable and represents a challenge to manage it in the most useful manner.

Man is in nature and yet transcends nature by his unique ability to learn and to teach extant knowledge, thus making it possible for each generation to stand on the shoulders of all previous generations. Man is part of nature albeit he is a dramatic and singular part of it. His kinship with other living creatures of the earth is implicit in the sequence of aging for it is quite similar to that of all others.

Man is primarily the product of his heredity. He is secondarily the product of his culture. The implication is sequential rather than consequential. If he has opportunities for higher education, exposure to the principles, ideas and methods of persons of superior intellect, and a natural or acquired ability to absorb, to understand and to make his own the principles of scientific inquiry, the ideas of logic and ethics and the methods of study and utilization of modern knowledge, he should be joined in the ranks of the most advanced culture of his time.

The cycle of life is an assured and natural sequence for all human beings. All persons are aware that the span of life is ultimately limited. Some fail to accept the challenge to make the most of life during immaturity and maturity when it is within their power to do so. They have difficulty in conceiving of themselves as becoming non-existent at some future time.

Many opinions have been written about the good life and how it should be lived to the greatest advantage, ranging from the practical philosophy of Confucius of the sixth century B.C., to some rather esoteric modern concepts. The promotion of some organizations and schemes is almost entirely for profit and little less than a racket.

There would be little service in describing or comparing these widely diverse opinions. They are available to all men who read. In the long run, ever, man tends to take unto himself what is intellectually or emotionally acceptable to him unless, of course, he has been completely indoctrinated with a system of ethics, morals, philosophy or religion before he reached an age of discernment. In the end, every man must be his own philosopher.

Aging has been described as beginning at birth and continuing throughout life. It should be a process of continually maturing both physically and mentally. The challenge is to maintain high physical and mental capabilities by keeping active. This does not mean the development of muscles suitable for champion weight-lifting nor the intellectual activity that might be involved in solving the long-disputed method of light propulsion. It means, rather, a golden mean of physical exercise in moderation and the mental activity that might be conducive to understanding the quantum theory.

Metabolic change and exchange are the processes of growth and healthful living, therefore, we must undertake new ventures, learn new skills, and entertain new concepts and attitudes. A rigid pattern of life does not contribute much to development. When developmental changes cease to take place, senescence supervenes.

Report on Lost Days

During the year ending June 30, 1960, illness and injury caused the American people to stay home from work, stay in bed, or otherwise cut down their usual activities for an average of sixteen days per person, including six days of bed disability. These statistics are about the same for the year 1958-59.

These figures come from the latest in a series of published statistical reports of the Service's National Health Survey. They apply to the civilian population of the country exclusive of persons confined to long-term institutions.

The new report also shows that during the year ending June 30, 1960, more disability was experienced by women than by men. People over forty-five had more disability days than did younger persons, with the rate increasing sharply with advancing age.

People who live in rural farm areas of the country reported more days of disability, on the average, than those living in urban and rural-nonfarm areas.

Those in the lowest income groups reported the highest rates of disability, and the number of disability days dropped consistently with rising income.

Saginaw County Rehabilitation Program for Indigents

V. K. Volk, M.D., Dr. P.H.
J. A. Maurer, M.D.
Saginaw, Michigan

THE GOAL of the program is to offer the patients maximum opportunities for total or partial rehabilitation or at least independence in self-care to assure a greater degree of self-reliance. Although some strides have been made, it is recognized that the problem is difficult and complex because the group of sixty-five years of age, while representing only 10 per cent of our population, has a much larger incidence of long-term illnesses. In addition, a substantial segment in this group is dependent upon the County, State and Federal Governments to maintain the minimum standards of living or "Life's Necessities."

History

Until three years ago, the Saginaw County Hospital did not have a Rehabilitation Program for long-term patients except for tuberculosis patients. Some reluctance had to be overcome about starting the Rehabilitation Program for the aged on the part of the Board of Supervisors, the Welfare Department and even the physicians. However, a fifty-bed Unit and Rehabilitation Center became operative on September 3, 1958, as a part of Saginaw County Hospital. One of the important factors in its success was the creation in 1958 of a Geriatrics Committee by Dr. Edwin Galsterer, President of the Saginaw County Medical Society, which was given the responsibility of reviewing the program, development of criteria, and promotion of the professional interest in this program. The cooperative efforts of the Geriatrics Committee have contributed greatly to the successful operation of the Rehabilitation Center.

Program

Saginaw County Hospital is a fully accredited 275-bed hospital for the care of tuberculosis, communicable disease, chronic disease and mental patients. Income is derived from State Tuberculosis Subsidy; hospitalization of out-of-county tuberculosis and contagious patients; the Social Welfare Board payments for hospitalization of indigent chronic disease patients, Blue Cross, county tax appropriation, payment for private communicable disease cases, Veterans Administration receipts, et cetera.

In line with the established policy of the Board of Supervisors, only indigent patients are admitted to the Chronic Disease Service, upon authority of the Social Welfare Board when requested by physicians. Although the Chronic Disease facility could occasionally admit private patients, the medical profession was reluctant to encourage this policy. Until additional beds are available, and until the admission policy changes, admission to this service will be restricted to indigent patients. The treatment of the patient is guided by the family physician or by a full-time hospital physician with special interest in geriatrics, while the Rehabilitation Program is supervised by a team of physiatrists from the University of Michigan. Through James Rae, M.D., George Koepke, M.D., Leonard Bender, M.D., and Edwin Smith, M.D., one physician visits the County Hospital three or four times a month to counsel the medical and paramedical staff members, and to prescribe for the rehabilitation needs of the patients.

Staff conferences are attended by the Medical staff, the physical therapist, occupational therapist, home-nursing coordinator, public health nurses and occasionally by other practicing physicians. When necessary, speech correctionist, psychologist, and counselor in vocational rehabilitation are in attendance.

All patients' progress is reviewed at the Staff conferences every six weeks or oftener when indicated. If within three months a patient does not show any evidence of rehabilitation potential, the patient is transferred to a medical-care facility, nursing home, or to a home situation.

From September 3, 1958 to June 30, 1961, 325

Doctor Volk is Medical Superintendent and Doctor Maurer is Chief of Medical Services, Chronic Disease Unit, Saginaw County Hospital, Saginaw, Michigan.

patients were admitted to the Chronic Disease Unit of Saginaw County Hospital. Some pertinent information about the group is shown in Table I.

TABLE I. SAGINAW COUNTY HOSPITAL CHRONIC DISEASE SERVICE

Patients admitted	325
Patients discharged	195
Patients expired	79
Still hospitalized (As of July 1, 1961)	51
(Number of Hospital Days for the period: 43,038)	
Patients Admitted:	
Under 50 years	46
50-60 years	50
60-70 years	66
Over 70 years	163
Total	325
Patients Admitted From:	
Home	137
Local General Hospitals	134
Nursing Homes	12
County Infirmary Hospitals	13
County Home	6
Osteopathic Hospital	10
Saginaw County Hospital	10
Other	3
Total	325
Condition on Admission:	
Unconscious	4
Critical	61
Bedfast	154
Semi-ambulant	63
Ambulant	43
Total	325
Rehabilitation Potential on Admission:	
Yes	145
No	71
Doubtful	109
Total	325
Patients Discharged:	
Improved	178
Unimproved	16
Unchanged	1
Total	195
Length of Hospital Stay—Discharged Patients	
Less than 10 days	12
10-30 days	16
30 days and over	167
Total	195
Patients Discharged to:	
County Home	17
Nursing Home	23
Home	108
Infirmary Hospital	23
General Hospital	3
Saginaw County Hospital	3
Other	18
Total	195
(Average length of stay of discharged patients: 165 days)	
Patients Expired:	
Length of Hospitalization of Expired Patients:	
Less than 10 days	19
10-30 days	17
30 days and over	43
Total	79
(Postmortem Examinations: 46 cases or 58 per cent)	

The most satisfying observation is that 55 per cent of those discharged returned home and less than 3 per cent were transferred to general hospitals. The fact that 41 per cent were transferred to nursing homes and similar related institutions is indicative, of course, that this large group either has not a satisfactory home situation or failed to show any rehabilitation potential. Also the fact that 24 per cent of all admitted patients expired is indicative of the severity of illness among patients admitted. These facts are also indicative of the importance of early diagnosis and treatment.

In analyzing the group of 219 patients who were admitted unconscious, critical or bedfast, 61 patients returned home, 4 transferred to hospitals, 49 transferred to nursing homes, infirmary hospitals, or related institutions, 72 expired and 29 are still hospitalized.

Of the 106 semi-ambulant or ambulant patients, 58 returned home, 3 were transferred to hospitals, 25 were sent to nursing homes or related institutions, 13 still hospitalized and 7 expired.

In this report several points deserve note:

1. The County Hospital Rehabilitation Center and Chronic Disease Unit has been established to offer rehabilitation service for those patients who might be benefited from it There is general agreement that it is very difficult to determine, prior to hospitalization, the degree of rehabilitation potential possessed by patients. Those who can benefit from rehabilitation are given an opportunity for hospitalization for evaluation in the Rehabilitation Center.

2. Even though a large group of bedfast and

critical patients may not have rehabilitation potential, this indigent group, in our opinion, does not belong in a nursing home or medical-care facility because these patients need intensive medical and nursing care and hospital services which are not usually available to them in less complete medical facilities. In our opinion, these patients belong in a general hospital or a chronic disease hospital.

Because a large number of patients return home, we are making every effort to adjust the home situation, both physical environment and family attitudes, to the patients' needs. With this purpose in mind, the Home Nursing Coordinator in the Rehabilitation Center assists the families of the patients in many ways, some of which are as follows: (a) Helps to plan necessary changes and adaptations in the home to facilitate the patient's care on his return home. (b) To train the family in the fundamental principles of bed-side nursing, physical and occupational therapy as needed by the patient at home. This training program is provided in the Chronic Disease Unit. (c) Prepare the family psychologically to accept the patient and care for him at home. (d) Arrange for home medical supervision by the family physician. (e) Arrange for periodic recheck of discharged patients in the Rehabilitation Center when approved by the family physician.

Special Needs of the Program

Over 20,000 laboratory tests were made for Chronic Disease patients and 2500 x-rays were taken in the last twenty months.

In analyzing the clinical findings of 119 patients admitted in the year 1960, a very large number of co-existing conditions were found and many of them *per se* justified hospitalization. Many of these ailments have not been known by the patient or the physician prior to their hospitalization. The fact that many patients have a number of co-existing ailments reflects on the necessity of having laboratory, electrocardiogram, x-ray and dietetic services in institutions caring for long-term patients. This, of course, is in addition to the other services which normally would be available in the Rehabilitation Center.

Quo Vadis?

Obviously, the field is so new that there will be many problems and many reasons for slow progress. Some of these are governmental indecision, conflicting ideology, lack of professional enthusiasm for the program coupled with community apathy which will take many years to overcome. No longer, however, can the citizens and the profession maintain a "*status quo*" or "Horse-and-buggy" psychology toward the problem because present-day medical care of the aged should be in unison with present-day knowledge in the field of geriatrics.

Statements made by Dr. Freddy Homburger in connection with the debilitated hospitalized, elderly patients are worth repeating time and again.

> "The worst sin, which is committed every day in many nursing homes and hospitals, is to consider some of the extremely debilitated individuals as purely 'terminal care' problems or subjects for 'custodial' care. A few years ago, these were perfectly justifiable terms. The majority of such patients died after a few days of 'terminal' care and those who survived miraculously, remained hospitalized custodial cases for the rest of their lives.
>
> "Those who oppose this professional skepticism and advocate an aggressive therapeutic attitude toward the chronically ill and aged are able to accomplish much with the means at hand. They can rehabilitate many who have been given up as incurable and palliate the discomforts of those who cannot be cured. In the course of their work, they can uncover many areas for new researches that need to be conducted."

While in Michigan progress is being made, greater impetus to the program may be made from realization that there should not be any fear of competition with general hospitals because the hospitals for long-term patients have limited goals. The patients in need of surgical service or other services which are not available in institutions for long-term patients are transferred to a general hospital. The patients who do not have rehabilitation potential, or who do not need intensive medical care, should be cared for either at home or in nursing homes or in a medical-care facility.

The grave concern of all of us is how to meet the growing demands for hospitalization of long-term patients. Without doubt, a prerequisite for this is "the right bed, for the right patient, at the right time." Acceptance of this premise by the welfare departments, which hold the "purse strings" for medical care of indigents, is a goal often very difficult to achieve because of lack of medical leadership within the great majority of welfare department organizations.

How Can These Goals Be Reached?

Obviously we must have the doctors' cooperation, but the medical leadership from within an institution for long-term patients has a major responsibility to stimulate professional interest in the problems of geriatrics and rehabilitation. Every institution for long-term patients should promote conferences on

aging with speakers of national prominence to discuss with the doctors the challenge, problems and horizons in the field of rehabilitation for the aged. To achieve the goal of securing the doctors' cooperation, the hospitals for chronic disease patients should encourage the family physicians to take personal charge of their elderly patients. The medical leadership from within the chronic disease hospital should provide the private physicians with certain information regarding their patients' progress when these patients are temporarily cared for by hospital staff physicians. In Saginaw County Hospital, if the private physician does not take charge of the patient, a progress report is sent to the physician every six weeks.

Another method of maintaining the interest of the physicians in the problem of geriatrics is reviewing the individual patient's progress through visual demonstrations. We have attempted to do the following:

We take short moving pictures of every patient admitted to the Chronic Disease Unit. We repeat this procedure every six weeks or so, splice the films together and then show the film on the patient's progress to the physicians' group, or to the individual physician. These films take seven to eight minutes to run and give a chronological review of the patient's progress. We believe this method of visual reporting has been most helpful in developing professional interest among our physicians.

Summary

1. The proper medical care of long-term patients offers promise of return to normal living or self-care to many people. In our series 55 per cent of those discharged went home.

2. Every community and every professional group has a challenge to provide adequate facilities in the community for intensive care and a rehabilitation program for the aged not only in a hospital but also at home.

3. The cooperation of the physicians is our insurance for future progress in the development of a dynamic rehabilitation program in a chronic disease hospital and follow-up program at home.

4. To achieve the goal of "the right bed, for the right patient, at the right time," a screening system should be established for long-term patients. On the basis of our experience, any patients before being transferred to a nursing home or medical-care facility should be hospitalized in a general hospital or chronic disease hospital for the purpose of diagnosis, treatment, evaluation and determination of rehabilitation potential. Those patients who do not need intensive medical care could be transferred to a medical-care facility, a nursing home or a similar related institution. Those who show rehabilitation potential should have access to a rehabilitation program in a hospital that offers this type of service.

Limitation of space prevents a discussion on: (a) The importance of organized community efforts to the program; (b) Disability prevention through early diagnosis and treatment; (c) Role of the family in developing the patient's attitude; (d) Indispensability of the family physician and health departments in this program.

Finally, and in gratitude, we wish to report that the success of Saginaw County Hospital's program has been made possible through the fine cooperation of our physicians.

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Process of Aging

The greatest obstacle today to effective medical education in the field of geriatrics is "the lack of a substantial body of scientific information which defines and describes the process of aging."

"Senility . . . the difference between chronologic and biologic age . . . changes in bone and muscle tissue . . . and the onset of malignant disease are typical problems of aging which are now only partially understood," the dean said.

"If medical education is to meet the needs of geriatric medicine for the future, it must be in terms of a more effective understanding of the basis of the problems."—WILLIAM N. HUBBARD, M.D., Dean, University of Michigan Medical School.

The Aging Person in the Labor Force

Current Research Implications for Medical Care Financing

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A SENSE OF GREAT CONCERN is raised in the minds of many persons on hearing the oft-quoted statement that persons 65 years of age and over make up a smaller and smaller part of the United States labor force. Testimony before the McNamara Senate Subcommittee on Problems of the Aged and the Aging has stated that "about 11 million people at the present time aged 65 and over are dependent upon income or support from sources other than employment . . . (another) point, which is significant, is that the employment participation of men is declining. This, of course, is a very grave factor.[1,2]" The immediate question that most physicians, hospital administrators and voluntary health insurance plan officers have is "What does this mean to my community?"

The meaning of the decline in participation of the aged in the labor force may be highlighted by more intensive examination of the population and labor force data of the economy. The aged person in or out of the labor force does not stand isolated; social, economic and psychological forces must be considered.

Growth of Number of Aged

With advances in public health and medicine, the population aged sixty-five and over has increased approximately to 15.7 million in 1960.[3] Other sections of the population have also been increasing so that, while there has been a growth in numbers as a percentage of the total population, the portion of the aged in our economy has been leveling off.

As Mr. Ray Brown, Administrator of The University of Chicago Hospitals, recently stated, "The experts say there will be 22 million people at aged 65 and over by 1975, compared with less than 14.5 million in 1956; an increase of 7.5 million or 52 per cent. This compares with the . . . increase in the total population of 29 per cent in the same period.[4]" The aged population, however, currently is 15.7 million out of a population of 180 million. With a relatively small base, any significant rise in numbers will cause a large percentage increase. The increasing growth of other age groups, however, has led to the estimate that the aged in the population will have increased only 1 percentage point from 1955 to 1975.

The United States is, therefore, more than halfway through its immediate population growth as far as the aged are concerned with approximately 16 million persons out of a potential 22 million aged persons by 1975. The greatest growth of the population will be among those between aged 10 and 19, the high school and college age group. This group does not utilize the hospital or physician a great deal and does not normally present a payment problem.

Years After Age Sixty-Five

Life expectancy has increased in the 20th century. In 1900, the life expectancy for white males was 48.2 years; by 1957 it was to 67.1 years. The latter figure is for a person who is born in 1957.[5] He is, however, not going to live 67.1 years between 1957 and 1975. Many aged persons now alive have lower life expectancies than those for children now being born. The greatest improvement in life expectancy has been among females. In 1900, the life expectancy of a white female was 51.1 years; for a non-white female it was only 35 years. By 1957 the life expectancy for a non-white female was 65.2 years and for a white female, 73.5 years.[5] Once the 65th birthday has passed, life expectancy is not changed greatly for the majority. In 1900 for a white male, life beyond 65 years of age was 11.5 years, by 1957 it was 12.7 years, or an increase of only a little over one year; for a white female, it went from 12.2 years to 15.4 years. The significant increases in life expectancy at age 65 have been in the non-white population.[5] More people are living to be 65, but once past this "magic dividing line" their life expectancy has not increased greatly.

Expansion in Work Life and in Retirement

In our concentration on the problems of the aged and retirement, the expansion of the American economy has sometimes been overlooked. Between 1929 and 1960, the gross national product in the United States rose from $104.4 billion to $501.3 billion, or an increase of nearly fourfold.[6] And the population increased from 76,094,000 in 1900 to 180,793,000, or less than a tripling of the population by 1960.[7]

In order to accomplish this tremendous growth in production, there was an increase not only in capital accumulation, but also in the working life of the individual. Fifty years ago there was very little difference between total life span and working life among men. Today, with a higher life expectancy of men and earlier labor force exit, the years spent in retirement have lengthened, but not as much as the years participating in the labor force. In 1900 the work-life expectancy for males was 32.1 years; by 1955 it was 42 years, an increase of practically 10 years. For females in 1900, the work life expectancy was 6.3 years; by 1955 it was 18.2 years.[8] Under 1900 conditions, a man of 20 had a life expectancy of 42.2 years, and a work life expectancy of 39.4 years. This meant a period of retirement of 2.8 years. By 1955 the years in retirement had increased to 6.5 years. In 1900, males entered the labor force earlier and left it later.[8] Under 1955 conditions, men entered the labor force much later having completed at least a high school education on the average. With this increase of practically 10 years of work life, he is able, on the average, to increase his amount of liquid and fixed assets available to him in retirement, not withstanding the increase in taxes.[9]

Decrease in Number of Non-Productive Workers

The Department of Labor estimates that for every 100 persons in the population in 1900 there were 36.4 workers; by 1940 this had been raised to 40.5 workers. By 1950 it had declined slightly to 39.9, but by 1956 it had been raised to 41.5 workers. It is estimated that by 1965 it may rise to 41.8.[8] Despite the growth in the number of the dependent groups, especially the very young and the old, during the present decades, the ratio of workers to the total population has risen, not falleh, and is expected to remain at a level of about 42 per cent to 1965. Part of the explanation is the huge increase in labor force participation by females. Today, despite the marked delay in entry into the working force and earlier exit, men put in more years of work than did their counterparts 50 years ago. In 1957, 53 per cent of all men aged 65-69 were still in the labor force, though only 28 per cent of those aged 70 and over remained in the labor force.[3] Longer life has enabled increased education, working and retirement time.

Increase in Number of Aged Who Are Non-Productive

For the last 50 years, there has been a steady decline in the percentage of non-workers in relationship to the productive workers in the labor force. In 1900, however, persons aged 65 years of age and over made up only 4 per cent of the non-workers, but by 1950 the aged made up 10 per cent of the non-workers.[10] In 1957, with a total population of over 171 million and the labor force estimated at 70 million, the ratio of non-workers among the aged increased to 11.5 per cent of this dependent group.[11]

This increase in the non-productive aged has been brought about by a series of demographic and social forces:

Greater Number of Persons in Older Age Group.— In our concern with the aged we have attempted to place all of the men and women 65 years of age and over into a single homogeneous group. There has been a tendency to overlook that there comes a point in a person's work life when he is no longer able to participate within the labor force for social or productive reasons. With the advances brought by medical science more and more people have been able to live over 70 and 75 years. There still comes a point when participation in the labor force does not have much attraction, and a decline in labor force participation by men and women in their seventy's and eighty's can be expected.

With the increase in longevity of women, the number who have never worked outside the home has increased also, and these women account for part of the decline in labor force participation. In March 1951, the Bureau of the Census conducted a sample study on persons 65 years of age and older who had any work experience during the last 10 years. "Of the 7 million people in this group, 5.3 million (mainly women) reported they had not been gainfully employed even a single day during the past 10 years." This, in a war period during which the demand for labor was extremely high, indicates that not even the pressures of World War II could induce them to accept jobs or employers to provide them with jobs.[12] Since women have a greater life expectancy than men

in the years after age 70, the statistical increase in the non-productive labor force for the entire group over age 65 is to be expected.

Compulsory Retirement Programs of Private and Public Industry have caused many persons to leave the labor market.[13] Part of the labor force exit may be due to lack of skills of these older people or, under the impact of automation, their past training may be obsolete. Movement of industry from settled areas in the North to suburban areas of large cities or to the South and West also have caused elderly persons to accept retirement, since they are unwilling to give up the ties of twenty to thirty years in a community in order to stay with the firm a few more years.[14] Although studies have shown that older workers are as productive as younger workers in many cases, employers are reluctant to hire older employees because of fears of potential costs of workmen's compensation, unemployment compensation or pensions.[15]

Farmers.—Many old people live in farm or rural non-farm areas. With the introduction of the soil bank plan under the United States Department of Agriculture, it has been to the advantage of many old farmers to "put their farms in the soil bank" and live off the proceeds.[16] Technically, they are out of the labor market; in reality, some are receiving as much income as they would have, if they continued farming.

Health Reasons.—Every survey shows that a large number of the aged leave the labor force for health reasons.[17] What has not been carefully analyzed is the low proportion of those retired persons answering the survey who leave industry due to compulsory retirement programs. On answering interviews, the retirees say that they have been let out because of health reasons.[17] Yet, if compulsory retirement is so widespread in American industry, we would expect much higher compulsory retirement reasons for their exit from the labor force. One may suspect that the health reasons may not be as important as obsolescence of skills.

No matter what the reasons, there has been an increase in the number of persons aged 65 years and over who are not receiving their income directly from the labor force participation. For the future these people may indicate the following to the purveyors of medical care:

More people may be living to 70 and 80 years of life at the present time. Many of these people are receiving Old Age Assistance (OAA). In Illinois, the average age of a person on OAA was 76 in 1953. Many of those in the over-70 age group are given support by public aid. In estimates made by the United States Department of Health, Education and Welfare this group will still remain by 1970.[18] Even with the growth in the Old Age Survivors Insurance (OASI) mechanism it is estimated that approximately 2.2 million persons age 65 and over or 11.3 per cent of the total aged will still be receiving OAA.[18] If the local public aid officials do not pay a fair share of the medical and hospital costs in providing care to the indigent, including the aged indigent, these persons may be a definite burden on the hospital, physician and the community.

Part of this increase in the nonproductive workers is a result of the creation of the industrial pension system with the flurry of collective bargaining agreements following the Inland Steel decision of 1948. Many large firms have instituted a pension system for the entire labor force since that time. By 1957, apart from the OASI program, 47 per cent of all non-agricultural workers had pension programs in the firms for which they worked against 34 per cent in 1945.[19] 1.3 million workers were receiving benefits from the private retirement plans in 1957. Additional pensions are being paid by the federal and local government pension programs. One group is receiving benefits under the Railroad Retirement System. Some retirees receive their pension check, social security check, and also a package of medical, hospital and surgical benefits provided to them in retirement. This group of recent retirees and their wives do not generally present an acute utilization or payment problem to the hospital.

Comment

The raw data that are being used on the labor force participation of the aged may not present the entire picture. Income from labor force participation is only one source of support for these persons. They also have their assets and resources to be called upon when it is necessary to provide for needed goods and services, including medical services. As an example, those 65 years of age and over receive $451 million annually in income from annuities.[19] In addition, when considering payment for medical care services, there may be an additional resource to pro-

vide payment for needed services in a "crisis." Recent research has shown that there are large numbers of aged persons living either with their families or in close proximity to their families.[20,21,22] For these aged persons it is the "extended" family that may be able to help them pay for the acute hospitalization or medical care bills.

Decline in labor force participation by the aged historically has been the sign of a rich or powerful nation. It has been found that nations with the highest participation of aged persons in their labor force are the poorest nations, Spain and Greece are examples. Nations with the low participation are the industrial countries such as the United States, the United Kingdom and Belgium. By itself, the decline in participation in the work force by men normally is a sign of a healthy economy able to support this non-productive element.

Although the burden of support for older persons and for their families in the next 25 years will fall upon an increasingly smaller proportion of the working population between the ages of 21 and 44, the increased use of capital and resulting higher productivity per man hour may lessen the burden of the non-productive young and old sections of the population on the economy In addition, it is hoped that the decrease in participation of the aged male and his replacement in the labor force by the better educated younger worker, the overall productivity of the labor force will not decline.[23,24]

There are, however, some unanswered implications for the future that may affect the voluntary health insurance field more than the physicians:

1. With the increase of those in the age 70-75 bracket, the increase in utilization of hospitals will be accentuated.[25] It is among this group that relatively heavy users of hospital services are found.

2. The large number of widows will have an effect on hospital utilization. Research in the United States and England seems to show that the single, widowed and divorced person makes more use of the hospital than those who are living with the spouse.[26,27]

3. It is expected that, based on experience of the late 1950's, those that are out of the labor force will make greater use of the hospital. For those in retirement and out of the labor force a greater use of the hospital is to be expected.

4. Research indicates that as more beds are available the more use there will be made of them. As we build more beds to meet the needs of our growing population in the next decade, it is expected that more and more of the aged people will make use of them. Research data from New York State, Saskatchewan, and Virginia show a per capita rise in utilization of hospitals as more beds are built. The increase in the number of the beds will lead to an increase in utilization by the entire population particularly by the aged.[28,29,30]

5. The growth in voluntary health insurance: The Department of Health, Education and Welfare states that, at the present rate of growth, "about 70 per cent of the aged beneficiary group will have some form of health insurance by 1965."[31] This estimate may be on the low side due to the current new enrollments in Blue Cross Plans and voluntary health insurance mechanisms. All available data show that those with voluntary health insurance use the hospital more than those without it. In addition, as we improve the plans for the aged by providing larger and better benefits, their hospital utilization will increase. Research in New York indicates that the better the plan of voluntary health insurance for the aged, the higher the utilization.[25]

6. The younger physician: With the decline in the number of older physicians trained before World War II in the next ten years and the increase in the number of younger physicians trained since the war increasing, hospital utilization may increase. Some research indicates that younger physicians tend to hospitalize their patients to a greater extent than those trained before the war.[30]

With these social forces operating and with voluntary health insurance available to pay for the hospitalization of the aged, in many cases, it may be expected that hospital utilization for the aged will rise and therefore the cost of providing this voluntary health insurance either on an experience-rated or community-ruled basis will also increase.

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Statistics on Aging

". . . Persons aged 65 and over constitute a substantial segment of the United States population, and their relative number is increasing.

The number of people aged 65 and over has more than quadrupled in the last 50 years, from 4.0 million in 1910 to 16.6 million in 1960.

In 1960, persons aged 65 and over constituted more than 9 per cent of the population compared with 4 per cent in that age group in 1910.

The Census Bureau estimates that by 1980 persons 65 or over will total 24.5 million, about 9 per cent of the total population, or approximately the current level.

Life expectancy at birth now approaches 70 years as compared to a life expectancy of 47 years in 1900. A 65-year-old person can now expect to live 14 more years."—"Areawide Planning for Hospitals and Related Health Facilities." Report from U. S. Public Health Service.

Medical Assistance for the Aged Act

AN ACT to provide medical assistance for the aged; to prescribe the terms and conditions for such medical assistance; to prescribe the powers and duties of the state department of social welfare and certain other state officers and agencies; to authorize the transfer and expenditure of state funds; and to prescribe penalties for the violation of this act.

The People of the State of Michigan enact:

Sec. 1. This act shall be known and may be cited as the "medical assistance for the aged act."

Sec. 2. As used in this act:

(a) "State department" means the state department of social welfare.

(b) "Commission" means the Michigan social welfare commission.

(c) "County bureau" means the county bureau of social aid.

(d) "Medical assistance for the aged" means medical and ancillary services as described and circumscribed in this act rendered persons eligible therefor.

(e) "Annual income" means income received during the 12 months preceding or anticipated during the 12 months following application for medical assistance under this act.

(f) "Medical institution" means a hospital certified by the state health commissioner or a county medical care facility.

Sec. 3. The state department shall establish a program for medical assistance for the aged under Title 1 of the federal social security act, as amended by Public Law No. 778 of the 86th Congress. Medical assistance for the aged shall be granted to any resident of this state 65 years of age or older who meets all of the following conditions:

(a) He has made application therefor in the manner required by the state department.

(b) He is not receiving old age assistance.

(c) His need for the type of medical care available under this act for which application has been made has been professionally established and no payment for it is available through the legal obligation of a contractor, public or private, to pay or provide for such care without regard to the income or resources of the patient. No payment shall be made under this act for any hospital service for any injury, disease or disability for which the patient is entitled to hospitalization or the cost thereof under the workmen's compensation law; except that payment may be made if an appropriate application for hospitalization or the cost thereof has been made under the workmen's compensation law, entitlement thereto has not been finally determined, and an arrangement satisfactory to the state department has been made for reimbursement if the claim under the workmen's compensation law is finally sustained.

(d) He, if unmarried, or not living with the spouse, has an annual income from all sources of not more than $1,500.00. If he is married and living with the spouse, he may have an annual income, including the annual income of the spouse, of not more than $2,500.00. Included in income shall be the amount of a contribution which a son, daughter or estranged spouse should be making to the applicant according to the standards of the state department, or pursuant to a court determination, if there is such a determination, except that the contribution shall not be included in income in respect to an application for hospitalization during the first 30 days of such hospitalization.

(e) He, if unmarried, has liquid or marketable assets of not more than $1,500.00 in value, or, if married, he and the spouse have liquid or marketable assets of not more than $2,000.00 in value. Excluded in making the determination of the value of liquid or marketable assets are the values of: (1) the homestead, (2) clothing and household effects, (3) cash surrender value of life insurance, and (4) not to exceed $1,000.00 of the fair market value of tangible personal property used in earning income.

(f) He has made no assignment or transfer of any real or personal property or income within 5 years immediately preceding the date of application for assistance under this act for the purpose of qualifying for medical assistance for the aged or for any form of assistance granted under the social welfare act, or for the purpose of increasing the amount of medical assistance for the aged or any form of assistance

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This act, introduced by Senators Beadle and Ryan at the extra session of the State Legislature in 1960, was revised for presentation at the 1961 session of the State Legislature and became law this year.

granted under the social welfare act or for the purpose of precluding recovery.

(g) He is not a patient in any institution as a result of a diagnosis of tuberculosis or mental disease.

(h) He is not an inmate of a public institution except as a patient in a medical institution.

Sec. 4. Eligibility for medical assistance for the aged shall be determined by the county bureau in which the application was filed. When eligibility has been established, the county bureau shall notify the county social welfare board of the county in which the applicant resides and list the type of services under this act which are required. The county social welfare board shall make provision for the services as long as needed or until notified by the county bureau that eligibility no longer exists. Service shall not be resumed after discontinuance without a new notification from the county bureau. The state department shall pay the county social welfare board for services provided under this act, after approval of each invoice by the county bureau, not less than 90% of the amount thereof from moneys available in a special medical assistance for the aged subaccount hereby established as part of the medical assistance account created by section 11 of the social welfare act, as amended. The commission may reduce the services available under this act to the extent necessary to keep payments from the subaccount within the appropriation available. The state department may determine the propriety of all claims for services rendered under this act.

Sec. 5. The state department may file a claim for reimbursement from the estate of a deceased recipient of medical assistance for the aged for payments made during his lifetime but no claim shall be paid until after the death of a surviving spouse if there is one except a claim made in respect to improper payments of medical assistance. All claims under this section shall be fifth class claims.

Sec. 6. The powers and duties of the state department and the county departments of social welfare relating to the administration of federally subsidized programs under the social welfare act are hereby granted and imposed on these departments insofar as applicable to medical assistance for the aged. Such rules and regulations shall provide safeguards which restrict the use or disclosure of information concerning applicants and recipients to purposes directly connected with the administration of this act. A hearing shall be provided any applicant or recipient of medical assistance under this act as provided in sections 9 and 37 of the social welfare act. The commission shall adopt all necessary rules and regulations for implementation of this act in accordance with Act No. 88 of the Public Acts of 1943, as amended, being sections 24.71 to 24.82 of the Compiled Laws of 1948, and subject to Act. No. 197 of the Public Acts of 1952, as amended, being sections 24.101 to 24.110 of the Compiled Laws of 1948.

Sec. 7. Persons eligible for medical assistance shall be entitled to the services enumerated in sections 8, 9 and 10 of this act. Such services shall be rendered upon certification by the attending licensed physician that a service is required for the medical treatment of an individual. The services of a medical institution shall be rendered only after referral by a licensed physician and certification by him that the services of the medical institution are required for the medical treatment of the individual, except that referral shall not be necessary in case of an emergency. Periodic recertification that medical treatment which extends over a period of time is required in accordance with regulations of the state department shall be a condition of continuing eligibility to receive medical assistance.

Sec. 8. Hospital services to which an eligible person is entitled, when furnished by a hospital certified by the state health commissioner or by a county medical facility approved by the department, shall not exceed those services furnished by the Michigan hospital service corporation under its comprehensive hospital care certificate in effect on September 1, 1960, and on file with the state commissioner of insurance, as determined by the state department. The period of inpatient hospital service shall be the minimum period necessary in this type of facility for the proper care and treatment of the individual.

Sec. 9. Physicians' services to which an eligible person is entitled shall not exceed those services furnished by the Michigan Medical Service under its M-75 Blue Shield plan in effect on September 1, 1960, and on file with the state commissioner of insurance, as determined by the state department.

Sec. 10. Effective July 1, 1961, home nursing service may be provided to the extent found necessary by the attending physician and the state department. Following hospitalization for acute illness, care in a state licensed nursing home may be provided for not to exceed 90 days in any 12 months' period.

Sec. 11. Any person who violates any provision of this act for which no penalty is provided is guilty of a misdemeanor. Whenever any person receiving medical assistance for the aged is found to have provided inaccurate information regarding his resources or income or those of his spouse, the amount of medical assistance for the aged granted during any month in which the person was ineligible may be recovered in an action at low. Failure to provide the state department with full and accurate information at time of application or promptly thereafter whenever changes occur in property or income shall constitute a fraud.

This act is ordered to take immediate effect.

County Welfare Directors

COUNTY	*NAME AND ADDRESS*	*PHONE NUMBER*
Alcona	Mrs. LaReign I. Johnson, Box 118, Court House, Harrisville	PArkview 4-5138
Alger	Miss Alice C. Tucker, Box 354, Court House, Munising	EVergreen 7-2253
Allegan	Mrs. Beatrice Guscinski, Court House, Allegan	ORchard 3-2143
Alpena	Mrs. Florence Brooks, Court House, Alpena	ELmwood 6-1570
Antrim	Mrs. Helen Smith, Court House, Bellaire	JEfferson 3-3566
Arenac	Miss Clara M. Stone, Court House, Standish	VIking 6-7511
Baraga	Mr. Kenneth J. LeBerge, Box 136, Court House, L'Anse	L'Anse 4-3987
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Bay	Carl Anschutz, 812 N. Jefferson, Bay City	TWinbrook 5-5527
Benzie	Clayton McCombs, Court House, Beulah	TUrner 2-4311
Berrien	Wesley Bowerman, 305 Michigan, or Box 652, Benton Harbor	WAlnut 6-2138
Branch	Willmar Moore, Court House, Coldwater	BRoadway 8-5327
Calhoun	William Morgan, 203 Capitol Building, Box 240, Battle Creek	WOodward 2-5195
Cass	Mrs. Ruth Larson, Court House, Cassopolis	HIckory 5-2971
Charlevoix	Mrs. Doris Reynolds, Court House, Charlevoix	LIberty 7-2091
Cheboygan	Preston H. Davis, Court House, Cheboygan	MAdison 7-2211
Chippewa	Albert Bernabucci, 140 W. Spruce St., Salte Ste. Marie	MElrose 2-3377
Clare	Mrs. Leanore Hughes, Court House, Harrison	KEllogg 9-4171
Clinton	Mrs. Julia Jury, 111 E. Walker, St. Johns	CAnel 4-4869
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Delta	Lyle Plowman, State Office Building, Room 233, 305 Ludington, Escanaba	STate 6-5394
Dickinson	Sol Beaupariant, 805 Vulcan, Box 429, Iron Mountain	774-1484
Eaton	Mrs. Eva Ruperd, 117 W. Lawrence, Charlotte	543-0860
Emmet	Mrs. Ruth E. Chamberlain, 218 Park Avenue, Petoskey	DIamond 7-2471
Genesee	Edward J. Sieniki, 2413 Industrial, Flint 5	CEdar 9-3101
Gladwin	Mrs. Sylvia Richmond, Court House, Gladwin	GArden 6-9251
Gogebic	Walter E. Bennetts, 305 S. Sophie Street, Bessemer	2711
Grand Traverse	Firmin Ruenauver, Court House, Traverse City	WIndsor 7-6232
Gratiot	Mrs. Elizabeth Donahoe, Court House, Ithaca	5241
Hillsdale	James Gier, Court House, Hillsdale	HEmlock 7-2112
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Ionia	Mrs. Hazel Smith, Court House, Ionia	83
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Keweenaw	Miss Elizabeth Bryant, Allouez Township Building, Box 352, Mohawk	617
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Luce	Alvin Covell, Johnson Building, Drawer 27, Newberry	251
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Mason	Mrs. Geneva Lindquest, Court House, Ludington	VIctor 3-8800
Mecosta	Mrs. Lela Freiberg, Court House, Big Rapids	796-5535
Menominee	Mrs. Bernice Paquette, Court House, Menominee	UNion 3-5612

COUNTY WELFARE DIRECTORS

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Allergic Anaphylaxis

"Probably the first allergic disease described is that of insect allergy," says Peter P. Barlow, M.D., of The University of Michigan Medical Center.

"In 2641 B.C., King Menes of Egypt met his death following a wasp or hornet sting. . . . Over the years, there have been occasional isolated reports of death due to insect stings."

Some sudden deaths reported as due to heart failure or heat prostration may really be cases of allergic reactions to stings, Dr. Barlow says, adding that everyone reacts to the stings of bees and wasps—there is pain, redness, probably swelling, and it may last one or two days.

This is a normal reaction to the insect's venom, while an allergic reaction to an insect sting "is either a very severe reaction at the site of the sting such as swelling, or other reaction such as asthma, hay fever, hives, or allergic shock."

Dr. Barlow explains that according to the principles of immunology, we build up an immunity to certain diseases either by vaccination or by actually having the disease. Our bodies form protective antibodies in the blood when we are first exposed to a harmful agent. Occasionally, when the antibody combines with the offending agent, allergic shock, called "anaphylaxis," may occur due to the liberation of certain chemicals.

Self-Help Devices in Arthritis

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IN THE FIELD of chronic illness, the chief disabler is arthritis. Disregarding the immediate classification of the type of skeletal involvement, when definitive care has been exhausted (or is still being maintained), physical medicine and rehabilitation is the only discipline applicable in management of the arthritic patient. By the judicious use of physical and occupational therapy procedures, it becomes possible for the patient to meet the normal demands of daily living. As improvement in efficiency of function results, the program can be enlarged to become "dynamic and total, designed to meet the physical, emotional, social and vocational needs" of the chronically disabled. Therefore, the purpose of this discussion is to elaborate one segment of such a program, namely, the utilization of adaptive equipment (usually termed self-care devices) in promoting needed functions in the activities of daily living.

Retraining must be in the essential activities of self-insufficiency: personal hygiene, dressing, eating, travel which consists of ambulation and elevation, general activities about the home, shopping and business areas. The adaptive equipment and training in usage takes cognizance of upper and lower extremity joint limitation and weaknesses, resulting in a maximal improvement of function.

The major pathologic process is that of interference with joint motion. In the upper extremities, loss of reach and grasp must be lessened by the use of adequate devices and rehabilitation techniques. Limitations of the shoulders interfere with dressing and eating; in the elbows, flexion deformities with limited pronation and supination prevents rotation of objects; stiffness of the fingers reduces dexterity and prehensile grasp. When the thumb and the two adjacent fingers are stiff, self-care in buttoning, grasping, writing, typing are diminished in proficiency. Ulnar deviation deformity prevents hand usage in general activities at home and at employment. Frequently, the non-dominant hand must be retrained with the involved hand and its adaptive equipment then becomes the assistive limb. Where the spine becomes "rhizomylique," the ramrod posture interferes with positional change, getting in and out of bed and chairs or transference to a horizontal or vertical position. Stiffness at the hips results in essentially the same limitations. Stiffness of the knees and ankles interferes with ambulation and stair climbing (elevation). Finally, where extensive involvement is present, as in rheumatoid arthritis, transference to and from a wheelchair, to a bed or toilet seat, car seat and the like then requires special wheelchairs, elevated toilet seat and the like. Braces, crutches, canes, plaster and plastic supports are important, but will not be elaborated upon in this paper.

With reference to physico-pathologic factors, functional interference in arthritis is important. Pain, fatigue, increasing trauma to weight bearing joints must be lessened. Cardiac and pulmonary studies have shown a 20 per cent lessening in cardiac output when an arthritic can ambulate, than when he requires crutches. Lack of motivation and dependency on the family is lessened, resulting in less psychological trauma to self and members of the milieu. Efficiency in performance improves, both as a homemaker and as a breadwinner.

Only a few aspects can be discussed relative to a handicapped arthritic patient in the application of self-help devices; the following discussion is illustrative.

A. *Stiffness of Spine and Hips.*—This interferes with dressing functions at the level below the umbilicus.

1. *Dressing Activities*
   (a) Pulling on shorts in a lying, sitting or standing position: tape loops are sewed into the waistband; two dowels with cup hooks are inserted, helping to pull on the garment.
   (b) Strips are tied to belt loops or suspenders are preattached: used for pulling up trousers.
   (c) Zipper fly front closing to which is attached a small ring for easier grasp.
   (d) Stocking put-on devices: long tapes with corset garters at top of stocking, loops on stockings with dowels with hooks, commercial devices such as "stocking put-on or stocking aid."

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(e) Shoe horns of the long-handled variety to permit easier insertion of feet.
(f) Tying shoelaces when unable to bend can be obviated by permanently tied elastic laces or a zipper with a metal ring in the guide.

2. *Toilet Transfer.*—In toilet transfer necessitated by hip and knee involvement, the ingenuity of the patient and family must be utilized as follows:
(a) Ordinary elevation of toilet seat.
(b) Raising of toilet on a wooden base.
(c) Wall hung toilet.
(d) Soft toilet seats padded with sponge rubber, producing the necessary elevation.
(e) Glider commode chair which slides over toilet seat.
(f) Arm rests to permit getting on and off toilet (either a grab bar or one supported on toilet bowl or floor.)

3. *Bed Transfer.*—This is difficult for the hip and knee as well as the spondylotic. The general principle involved is that the higher the bed, the better is the fulcrum to permit to-and-from bed movements.
(a) Wooden blocks are simple, cheap and permit adequate bed elevation.
(b) In wheelchair-confined arthritics, it is best to adjust the bed level to that of the wheelchair. A simple slide band of plywood can be used to bridge the gap of chair and bed, using detachable arms on the chair.
(c) Motorized bed unit permits elevation and lowering of head and foot of bed, raises to a sitting position and also permits the transference to wheelchair.
(d) Overhead trapeze for the ankylosed spine and hips or for the stiff knee permits self-transference when the upper extremities are functional.
(e) Portable lift can always be used when patient is in a fixed position of ankylosis.

4. *Tub Transfer.*—If a stall shower is available, it is generally far too small to permit maneuvering.
(a) Rail placement is important and should be determined by body mechanics. Grab bars properly placed permit ingress and egress from a tub.
(b) Slide board of plywood frequently permits easy access to own tub.
(c) When unable to step in and out, use a bench or a straight chair.
(d) If unable to lower self in tub, sit on a bench in tub and use shower hose.
(e) Commercial devices are available to help in tub transference: lifeguard rail, stepping stools, bath chair and portable lifts can be used.

B. *Impairment of Upper Extremities (with limited shoulder, elbow, or hand functions).*—Awareness of the general principles involved will lessen the need for complicated and expensive devices. It is wise to avoid clothing which fastens in the back; attempt to have two-piece garments, sleeves should be full except for arthritics who require axillary crutches; proper type of garment fasteners (these have been mentioned in the lower extremities.)

1. *Dressing Requires Simplified Clothing.* Zippers should have attached metal rings, use buttonhooks where there is loss of finger dexterity; hooked instead of tying aprons; loose sport shirt with short sleeves; dowel with attached closet hook pushes garment off of stiff shoulder; cuffs which are pre-buttoned or have elasticized thread as guides. Special clothing is manufactured for the women. coat dresses, tailored slacks, cotton belt with two detachable pockets with an attached Velcro closure (this is a two-strip nylon tape with a one-loop hook); tape with a Velcro closure.

2. *Bathing Aids* to compensate for restriction of motion in use of washcloths, brushes, and combs.
(a) Washcloths can be attached to a handle; a flexible rubber paddle attached to a jointed wooden shaft angled for approach to face permits easy function.
(b) A plastic sponge rubber bath brush gives increased reach, and contains a soap pocket.
(c) Nailbrush over palmar surface of hand with an attached grip or holder where one hand functions; or it may be attached to the wall by suction cups at the washstand.
(d) A bar of soap in a mesh bag worn about the neck permits personal hygiene.

3. *Eating Aids* are determined by the hand or reach problem.
(a) Long-handled spoons or forks—fifteen or more inches as required to compensate for loss of reach.
(b) Enlargement of the handle of the implement for loss of grasp.
(c) Rocker knives for cutting food are useful where incapacity is in dominant hand.
(d) Simple plate guards to keep food from falling off plates.
(e) Suction cups are useful for stabilizing dishes on the eating tray or table.

4. *Drinking Problems* may be simplified in a fashion to compensate for grasping and tilting; light-weight tumblers clip on involved hand to hold glass, plastic straw with metal clip to glass. When patient is bed-confined, there are commercial devices to prevent spillage in drinking utensils: "Kant Spill," "Wonderflo Cup," plastic container with tight-fitting cover and hole for plastic straw.

5. *Telephoning Devices* are available and are for reaching, grasping, and maintaining hold on handset. Dialing devices such as pencils, dialer, utensil holder, cuff around palm with dialer inserted into dowel can be used.

C. *Severe Involvement with Wheelchairs.*—It is important to remember some simple principles dependent on the handicap limitation. A wheelchair must be prescribed by the physician: adult or junior type, removable desk-arms, swing-away foot rests, hand brakes, size of wheels and casters, and even a pleasing color. There are infinite self-devices which can be bought, homemade and those fashioned by the patient. Many details of such equipment may be obtained from the Self-Help Device Office at the Institute of Physical Medicine and Rehabilitation in New York, a project supported by the Arthritis and Rheumatism Foundation.

In conclusion, the principles of physical medicine and rehabilitation utilizing self-help devices can make it possible for the handicapped arthritic patient to learn to live his life "in independence and with dignity. Some could return to work. The benefits of rehabilitation would not only extend to the disabled person alone, but to their families and to society as a whole."

Diagnosis and Treatment of Gout

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GOUT is a disease of uric acid metabolism. Gout has two forms: The first form is primary gout, which is an inherited disorder. The second form is secondary gout where the disturbance in uric acid metabolism is secondary to some other disease such as polycythemia vera, hemolytic anemia, lymphomas, leukemia, glomerulonephritis, or pernicious anemia treated with liver therapy. Although the mechanism for the abnormality in the purine metabolism is different in the secondary form, the clinical manifestations including acute and chronic arthritis, tophi or renal calculi are similar, as is the treatment. This paper, therefore, will restrict itself to the discussion of primary gout.

Gout is an important disease for the following four reasons:

1. It is a common disease. Many figures are available as to the incidence of gout, but an approximation of 1 per cent of the population would not be too inaccurate.

2. It is a chronic disease with a long duration of progressive illness. It will therefore be more common in an aging population. Among 300 residents in a home for the aged, the author found three definite cases of unsuspected gout and two other cases of probable gout.

3. The arthritic and other manifestations are painful, disabling, and even potentially lethal.

4. There is effective treatment for all phases of the disease and effective prophylaxis for all of the complications of the disease. The complications include renal calculi, tophaceous deposits in the bones, joints, bursae, tendons, blood vessels, mitral valve and cardiac muscle, nephrosclerosis with deposits in the parenchyma of the kidney, hypertension and atherosclerosis.

A recent study by Mustard and associates[1] showed a more active clotting mechanism in patients with gout with increased platelet counts and other abnormalities of clotting. This may explain the clinical impression of increased thrombotic vascular complications in gouty patients.

Pathogenesis of Gout

The pathogenesis of gout is unknown. A family incidence of about 15 per cent shows some hereditary mechanism. Talbott[2] found that 25 per cent of 13.6 non-gouty relatives of patients with gout had hyperuricemia. Pedigree studies suggest a single dominant factor of incomplete but high penetrance. However, Hauge and Harvald[3] believe that accumulate gene action may be the cause.

Using radioactive isotopes, much has been learned about uric acid metabolism. It has been shown that dietary purines contribute only small amounts of uric acid to the miscible pool as the body forms uric acid from carbon dioxide, glycine, and ammonia. Wyngaarden[4] showed that there is an overproduction of uric acid from glycine in some gouty patients, and this is often several times greater than the 1200 mg. of miscible pool in normal subjects.[5]

There also appears to be some deficiency in the secretion of uric acid by the kidneys in some gouty patients.[6] Uric acid is filtered through the glomeruli, reabsorbed but also actively secreted by the tubules.[7]

Diagnosis

It is commonly taught that the diagnosis of gout is a simple one. All that one needs to do is to think of it and then one will make the diagnosis. This is an oversimplification of the problem. Although about 50 per cent of the cases of gout will begin clinically with podagra and be simple to diagnose, the other 50 per cent may be very difficult to diagnose. The history is still the most important part of the diagnosis of gouty arthritis. A rapid onset of acute arthritis in an adult man after some characteristic provocations with complete subsidence in several days without residual symptoms is the standard of diagnosis. The dramatic response to colchicine therapy and an elevated serum uric acid are substantiating features.

History

Several points must be kept in mind if one is not to be misled. First, gout may affect any joint or bursa.

Hippocrates recognized this when he called the disease podagra, cheiagra, or gonagra depending on whether the big toe, wrist or knee joint were affected. It also may affect the upper extremities first. It tends, however, in early acute attacks to affect the peripheral joints. The bursa, too, may be affected, and olecranon bursitis should make one suspicious of gout. Second, gout may occur at any age from the second decade on. Younger patients are more likely to have a polyarticular onset. Third, gout may occur in women (5 per cent of cases or more) and then it often assumes atypical forms and superficially resembles rheumatoid arthritis. Fourth, a precipitating factor may often be found in the history of acute gouty arthritis such as surgery, emotional or physical stress, injections of liver or thiamine, diuretic drug use or recent excesses of food or alcohol. Fifth, renal calculi are commonly present in the past history.

Physical Examination

Physical findings with early arthritis are a very tender, warm, red, swollen joint with extension into neighboring soft tissues. Desquamation may occur. In chronic gouty arthritis, polyarticular swelling is present and, although less symmetrical, the joints are difficult to distinguish from those affected by chronic rheumatoid arthritis.

The finding of tophi is a relatively late finding, but should be looked for. The ear, olecranon bursa, and achilles tendon are the most common sites, but tophi may be found almost anywhere. A fever may be present with attacks of arthritis.

Laboratory

Laboratory results usually show a leukocytosis and an elevated sedimentation rate with attacks of arthritis, but these tests are normal in asymptomatic periods. A mild albuminuria and a decrease in renal function as evidenced by an elevated blood urea nitrogen may occur, especially with acute attacks of arthritis. Chronic gout often produces severe renal impairment. X-ray findings are positive for erosion in subchondral bones in only one-third of the cases of gouty arthritis, and then usually late in the disease. The usual x-ray finding is a normal joint in acute arthritis and hypertrophic changes in chronic arthritis.

Definite proof of the diagnosis of gout may be difficult in some cases. One should prove an abnormality of uric acid metabolism as one does with a glucose tolerance test in diabetes mellitus. One has no such tolerance test in gout. The serum uric acid is elevated at some time in the disease in 75 per cent of the cases with repeated testing. One probably can obtain a higher percentage of elevated uric acids if one uses a specific uricase determination of uric acid in the serum, which is the method employed by most research laboratories in the country. For practical purposes, one cannot rely on a normal serum uric acid to exclude the diagnosis of gout. Uricosuric drugs such as salicylates, steroids, phenlbutazone or its analogs, probenecid, ethyl biscoumacetate (tromexan) and bishydroxycoumarin (dicumarol) may falsify the test. Also during an acute attack of gouty arthritis, the serum uric acid tends to be lower than usual.

There are false positive elevations of uric acid which occur in the diseases previously mentioned as causes of secondary gout, psoriasis, chronic eczema, urticaria, and after tubular blocking diuretic agents such as chlorothiazide. The serum uric acid, therefore, is only an aid in the diagnosis of gout. The twenty-four-hour urinary excretion of uric acid is usually elevated in patients with gout,[8] but this test is rarely positive in patients without elevation of the serum uric acid.

A certain method for diagnosis of gout is the finding of a tophus and the proof of sodium urate crystals in the tophus by chemical means or polarized light microscopy. The urate crystals are dissolved in formalin so that absolute alcohol is necessary as a fixative for pathological study.

The examination of the synovial fluid from gouty joints holds promise of improved diagnosis. A recent report[9] showed positive doubly refractive, rod-like crystals. Two further methods to insure that these crystals are urates include polarized light microscopy and digestion with uricase.

Treatment of Gout

The treatment of gout depends upon the stage as well as the manifestation in that stage. Gout must be treated as a chronic disease with continued therapy for life, if the course of the disease is to be modified. The patient must be educated as to the cause of gout and gouty arthritis. The complications should be explained, as well as the aims of therapy. The patient's cooperation must be solicited and obtained.

Stage 1. Asymptomatic Hyperuricemia.—Although no therapy is mandatory at this stage, a diet with omission of the high purine foods and a uricosuric agent would be recommended to prevent potential complications. A large fluid intake to prevent renal calculi is also advised.

Stage II. Acute Arthritic Attacks with Complete Remission.—A diet eliminating the high purine foods, a uricosuric drug, and colchicine as a prophylactic arthritic drug would be advisable. This program has been proven effective in reducing the incidence of attacks.

Stage III.—Chronic Gouty Arthritis With or Without Tophus.—A diet of a low purine nature, a uricosuric drug, colchicine as a prophylactic arthritic measure and physio-therapy for joint stiffness and deformity would be advisable. This program has been shown to reduce the size of the tophus and to improve the chronic joint changes.[10] If ulceration of a tophus is imminent, it should be surgically excised. A large fluid intake would be advisable.

Treatment of Acute Gouty Arthritis

1. A low purine diet is recommended. Fasting is accompanied by a reduction in the excretion of uric acid in the urine and an elevated uric acid in the serum in the gouty and non-gouty patients. A pure fat diet has also been shown to increase the retention level.[11] Therefore, a low purine, low fat, high carbohydrate diet for acute attacks would be beneficial.

2. Absolute bedrest to relieve pain with protection of the joint by a cradle is effective. Hot or cold dressings may be helpful to selected patients.

3. There are many effective drugs for the treatment of acute gouty arthritis.

(a) Colchicine is a specific drug for gouty arthritis and effective in over 95 per cent of cases. The use of 0.65 mg. orally every hour or two until pain is relieved, or diarrhea, nausea, or vomiting occur, is the manner of administration. The sooner it is given in the attack, the more effective it is. The total number of pills for the therapeutic or toxic dose is usually constant, and this number or two less, if this is a toxic number, may be used again for succeeding attacks. Intravenous colchicine gives faster results with less side effects, but if any of the material is injected subcutaneously, a slough is likely to occur.

The exact site of action of colchicine is unknown. A new analog colcemide is too toxic for general use, as it may cause alopecia and blood dyscrasia. Colchicine is also used by most rheumatologists prophylactically, in a dose of 0.65 mg. once or twice a day to prevent acute attacks, with good results. Colchicine is used in this prophylactic dosage for chronic arthritis.

(b) Phenylbutazone (Butazolidin) may be used in place of colchicine in dose of 400 mg. initially and 200 mg. four times a day for three or four days. This will usually be effective, but it is not as specific as colchicine.

(c) ACTH (Corticortropin) may be used in conjunction with colchicine or phenylbutazone in doses of 40 to 80 units intramuscularly in the gel form two or three times a day for two days, but rebound arthritis may occur if it is used alone.

(d) Intraarticular injection of hydrocortisone will cause a non-specific suppression of the inflammation. This, too, should be used as an adjunct to colchicine or phenylbutazone.

4. A large fluid intake to prevent renal damage is desirable.

5. Maintenance of bowel function is of some value. Uric acid has been shown to be excreted in the gastro-intestinal tract with radio-active studies by Sorenson.[12]

The use of a laxative such as milk of magnesia is rarely necessary, due to the diarrheic effect of colchicine.

6. No salicylates should be used for the reasons explained below. Analgesic drugs such as codeine, darvon, demerol, or morphine may be needed.

Interval Treatment

1. A uricosuric drug should be used in all cases with an elevated serum uric acid or tophi. With the initiation of uricosuric drugs, attacks of acute arthritis may occur, so that colchicine prophylactically should be used.

There are several uricosuric drugs:

(a) Cincophen is judged by most physicians to be too toxic for general use, but may be used if all else fails in doses of 0.5 grams orally three times a day for three days a week.

(b) Five to six grams of salicylates daily may be considered an adequate uricosuric dose. Large doses of salicylates suppress tubular reabsorption of uric acid, moderate doses of salicylates depress tubular secretion and reabsorption and have little effect on ultimate uricosuria, but small doses suppress tubular secretion and hence produce a uric acid retention. Salicylates have the advantages of analgesia, low cost, and relief of morning stiffness as well as their uricosuric property. They also are the least likely uricosuric drugs to produce an acute exacerabation of arthritis. In my opinion, they are the best drug at the beginning of therapy. Their principal disadvantages are gastro-intestinal intolerance and the nuisance of the number of pills necessary. They also help

other forms of arthritis and therefore may interfere with a definite diagnosis.

(c) Procenicid (Benenid) blocks the reabsorption of uric acid. Salicylates in any dose block this effect and so must be avoided, if this drug is used. Procenicid is more potent than salicylates and may be judged safe after ten years of use. It rarely produces gastro-intestinal upset and drug rash. Its disadvantage is its expense. The usual range of dosage is 0.5 grams to 2.0 grams orally daily.

(d) Sulfinpyrazone (Anturan) is potent, but it is a sulfoxide analog of phenylbutazone (Butazolidin). The dosage here is 100 to 400 mg. orally daily. This is too new to be declared safe at present, as its parent drug has shown many side effects including duodenal ulceration, agranulocytosis, rash, edema, nausea, bloating, and vertigo on prolonged use. Salicylates block the uricosuric action of sulfinpryazone in any dosage.

(e) Zoxazolamine (Flexin), in doses of 250 mg. to 750 mg. daily, has potent uricosuric effects. Side effects have included drowsiness, light headaches, and gastro-intestinal symptoms. It is also expensive and too new to be declared safe for prolonged use, although it is apparently safe. Salicylates block the uricosuric action in any dosage.

2. A program of correction of concurrent obesity, if present, should be carried out. Weight reduction should be carried out slowly, and the patient should be warned that acute arthritis attacks may occur with this stress.

3. Colchicine prophylactically should be used in a dosage of 0.65 mg. orally once or twice a day.

4. A low purine diet or at least a diet eliminating the high purine foods and alcohol is recommended in most cases.

5. A large fluid intake is effective. Coffee and tea are not forbidden beverages as was believed in the past.

6. Treatment of uric acid calculi either pre-existing or occurring during therapy include the temporary reduction or stoppage of uricosuric drugs and the alkalinization of the urine. Sodium bi-carbonate, one heaping teaspoonful after each meal and at bedtime, usually accomplishes this well. A low purine diet probably should be advised in these patients.

Conclusions

1. Gout is a common, chronic disease of uric acid metabolism.

2. Although the pathogenesis of gout is unknown, much has been learned about uric acid metabolism.

3. The diagnosis of gout may be difficult, but careful attention to the history, physical examination, serum uric acid and x-ray findings in descending order of value will usually produce a presumptive diagnosis which will be confirmed by a trial of colchicine therapy for acute gouty arthritis or by proof of a tophus.

4. The treatment of gout depends upon the stage of the disease and the clinical and laboratory manifestations of that stage of the disease.

5. The treatment of gout is successful but must be continued for a long time, if attacks of gouty arthritis and other complications of gout are to be prevented, as there is no cure for the disease at present.

Summary

The reasons why gout is an important disease are presented. Some aspect of the abnormalities of the uric acid metabolism are evaluated. The clinical history, physical findings and laboratory findings leading to a diagnosis of gout are discussed. The principles of the treatment of gout including drug therapy are specifically enumerated for various stages of gout and certain common manifestations of the disease.

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Diagnosis and Treatment of Dissecting Aortic Aneurysms

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LAENNEC, in 1826, was the first one to use the term dissecting aneurysm. The process of dissection, however, was first described by Maunoir in 1802. Its grave prognosis is well known, and a large series by Shennan[1] shows that 35 per cent of the patients die suddenly or within a few minutes, 30 per cent lived from an hour to twenty-four hours, 27 per cent expire in the ensuing week, with only 8 per cent being alive beyond the first week (Table I). Some proximal dissection is present in virtually every case, and at times it

TABLE I. SURVIVAL RATE OF DISSECTING ANEURYSMS

Die suddenly	35%
Dead within twenty-four hours	30%
Dead within a week	27%
Alive after one week	8%

is wholly proximal. Seventy per cent of dissecting aneurysms terminate in cardiac tamponade. Patients that survive do so mostly through rupture back into the aortic lumen. Re-entry phenomenon, so-called "healed" dissecting aneurysm, occurs in the aorta or in the pelvic arteries in about 15 per cent. The surgical correction used so far imitates this phenomenon. The success already attained has begun to change the gloomy outlook of these patients. The few reported series,[2-4] however, come from large institutions only, noted for their large surgical, diagnostic and research facilities. It is the purpose of this paper to show that dissecting aneurysms can be demonstrated and adequately treated in smaller hospitals, and to stress the importance of confirming the diagnosis of a dissecting aneurysm before thoracotomy.

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Case Report

Mrs. P. H. (Case 0-8387), aged 66, a colored woman, obese, hypertensive and diabetic, was admitted to the hospital on December 6, 1960, because of severe precordial and epigastric pain that started suddenly at 7:00 o'clock that morning while hanging some clothes. The pain was of tearing quality, constant with exacerbations lasting about five minutes and radiating through to the back. The patient vomited twice prior to admission. The past medical history revealed that the patient had been treated for moderate hypertension of at least twenty years' duration. Her uterus had been removed for "fibroids" in 1939 and she had two "strokes" in 1948 and 1956.

Physical examination on admission showed an obese patient weighing 204 pounds (ideal 149), in acute distress, complaining of pain. Blood pressure was 210/140, with subsequent readings of 180/100, pulse 84, respirations 20. The pupils were equal; eye grounds showed grade II hypertensive changes. The heart was not enlarged, had a normal sinus rhythm with occasional premature contractions, and no murmurs were heard. The lungs were clear. Examination of the abdomen resulted in negative findings, and no abnormal pulsations were felt. The reflexes were equal, and no pathological reflexes were elicited. Bilateral femoral pulses were felt. The rest of the peripheral pulses were not discernible. Both lower extremities felt warm. While diagnostic studies were being conducted, the patient required large and frequent doses of Meperidine to ameliorate the pain. The patient was tried on a strict ulcer diet because of an upper gastrointestinal series report of an irregularity in the lesser curvature aspect of the bulb thought to be consistent with peptic ulcer. The remainder of the laboratory data was as follows: Hemoglobin 14.5 gms. per cent; WBC 6700; segmented 81 per cent; lymphocytes 19 per cent. Urinalysis showed a specific gravity of 1.013, numerous RBC/hpf, albumin 2 plus. Serology revealed no abnormalities. NPN of 37 mg. per cent. BUN of 20 mg. per cent. Three-hour glucose tolerance showed a fasting blood sugar of 106 mg., 178 mg. at one-half hour, 224 mg. at one hour, 278 mg. at two hours and 179 mg. at the end of three hours. An electrocardiogram revealed a normal sinus rhythm with occasional premature ventricular contractions. There were ST—T wave changes consistent with diffuse myocardial damage. A routine chest radiograph showed dilatation and tortuosity of the aorta (Fig. 1). Because the patient failed to improve and the pain continued unabated, we were

asked to see the patient in consultation. Dissecting aneurysm was seriously considered, and on December 23, 1960, an intravenous aortogram was performed that showed the typical double contrast shadow considered diagnostic of dissecting aneurysm (Figs. 2 and 3). The double shadow extended from the transverse arch down to at least the level of the diaphragm. The patient was prepared and an exploratory operation was performed the same day.

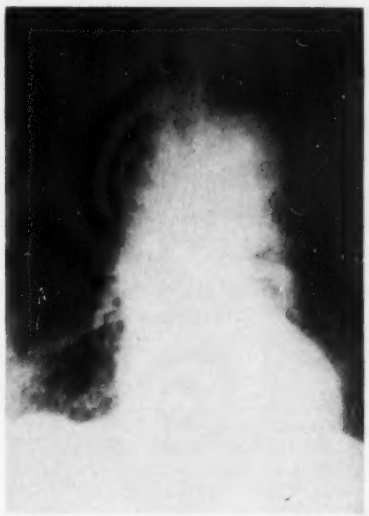

Fig. 1.

Fig. 2.

Operative Findings.—A left posterior lateral incision was made, and the chest entered through the bed of the resected seventh rib. Inspection revealed a normal appearing descending aorta with only slight dilatation of the arch and the ascending aorta. A pair of intercostal arteries were divided and the aorta dissected free. Aortic clamps were then placed proximally and distally, the aorta divided between them leaving a small portion intact medially to prevent complete separation and to aid in closure.

A double lumen was found which extended 75 per cent of the circumference of the aorta. Within the false lumen, a large amount of soft, jelly-like clotted blood was evacuated. The separated layers of the distal aorta were repaired by approximating the intima, media and adventitia with a continuous arterial suture of 4-0 black silk. Proximally, a portion of the intima 2 centimeters in diameter was removed, producing a window between the false and true lumen of the aorta. The divided ends of the aorta were then anastomosed by approximating the adventitia of the proximal portion to the full thickness of the distal portion. Thus, we formed an intimal window, allowing blood which entered the false lumen to re-enter into the true lumen of the aorta. The total occlusion time was twenty-nine minutes.

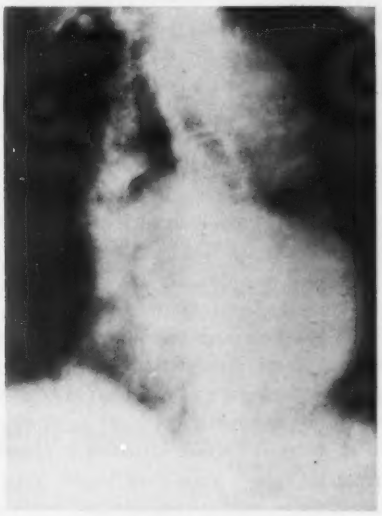

Fig. 3.

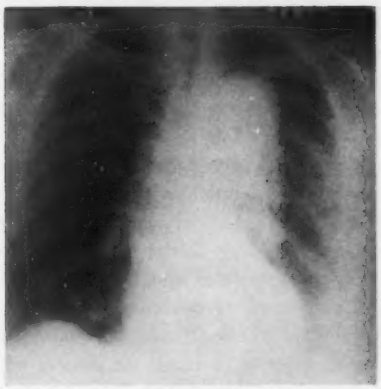

Fig. 4.

Postoperative Course.—The patient tolerated the procedure well, had no complications and the chief complaint of pain was no longer present. The patient was discharged and is doing well. Postoperative chest radiograph showed on appreciable change (Fig. 4).

Discussion

Dissecting aneurysms are not similar to other aneurysms of the aorta. In the majority of cases, rather than an external dilatation of the wall of the aorta, there is a hemorrhagic intramural separation of the adventitial and intimal layers. The false lumen so produced communicates with the true lumen through an intimal tear. The etiology is unknown.

Pathologically, degeneration of the media is found. It is felt that the lesion develops as a rupture of one of the thin-walled vaso-vasorum into the area of medial necrosis with secondary rupture of the intima. The force of the blood through this intimal tear separates the adventitia from the intima. As the dissection progresses, the pressure may be great enough to occlude the intimal lining of the various aortic branches. It is not uncommon for one to observe cyanosis of the extremities.

The most characteristic symptom of a dissecting aneurysm is its sudden onset. There is usually intense pain which may originate retrosternally and then characteristically progresses to the neck, back and down into the abdomen as the force of the stream of blood separates the aortic layers. The pain is described as being tearing in nature and has been compared with a red hot fire being thrust into the chest (Shennan).

If pain is produced by the actual dissection, the dissecting process in our patient was probably very slow to explain the duration of pain (seventeen days) and the very extensive dissection found at operation. The patient reported by Gilman and Baily[3] was still having pain when operated upon the eighth day, and also had a very extensive dissection. Of the seventy-nine cases of old "healed" dissecting aneurysms included in the series of Shennan, the process was confined to the arch in only eleven cases (14 per cent). If the above reasoning is correct, it follows that our patient could conceivably have "healed" herself, if left alone.

The width of the sac in our patient was nearly complete; it is realized that it can vary at different locations in the same dissection. In fifty-five cases in the series of Shennan, where width of the sac is given, fourteen completely surrounded the aorta, sixteen were nearly complete, in the remaining twenty-five cases the dissection occupied from 33 to 75 per cent of the circumference.

The technique of intravenous aortography as originally developed by Robb and Steinberg[5] is very simple. With the patient in the right posterior oblique position, 12-gauge needles are placed into the median anticubital veins of the left and right arms. A preliminary injection of sodium dehydrocholate† provides an accurate means of determining the circulation time. Simultaneous 1 mg. per kilogram of 90 per cent sodium diatrizoate* is injected intravenously, as rapidly as possible. Serioroentgens, four seconds apart, are then made, starting two seconds before the circulation time.

Serial exposures can easily be performed, and we have been able to obtain four exposures within a 15-second period without the use of a mechanical film changer, changing the films by hand.

TABLE II. LOCATION AND TYPES OF DISSECTING ANEURYSMS

	Shennan	*DeBakey & Cooley*
Limited to arch	41%	2%
From origin of aorta to descending aorta	35%	7%
Originating just distal to subclavian artery	21%	91%
Originating in abdominal aorta	3%	—

We cannot stress too greatly the importance of confirming the clinical diagnosis of a dissecting aneurysm by aortography before thoracotomy. We have witnessed a case in which a dissecting aneurysm was diagnosed clinically; however, at thoracotomy, the ascending aorta appeared to be normal, and the surgeon closed the chest, thinking the clinical diagnosis to be wrong. The patient died three days later. At autopsy, the patient was found to have an extensive dissecting aneurysm with cardiac tamponade. We must remember that this is an internal aneurysm, and the gross appearance of the aorta at thoracotomy may be normal. Thus, the surgeon with only a clinical diagnosis may hesitate to divide the aorta.

The surgical technique employed in our case is applicable in dissections that extend beyond the arch which constitute 56 per cent of the cases in Shennan's series, but 73 per cent of the cases in DeBakey's[4] studies. The extent of dissection in the 297 cases of Shennan remained limited to the arch in 121 cases (41 per cent). It extended from the origin of the aorta or the arch to the descending thoracic aorta or beyond in 104 cases (35 per cent). It originated in the thoracic aorta just beyond the left sub-

†Decholin, Ames Company, Inc., Elkhart, Indiana.
*Hypaque, Winthrop Laboratories, New York City.

clavian artery in 62 cases (21 per cent). In only 10 cases (3 per cent), the dissection originated in the abdominal aorta (Table II). The 41 per cent of cases where the dissection is limited to the ascending aorta and arch could conceivably be helped by the technique suggested by Gilman and Bailey.[3]

Summary and Conclusions

An extensive dissecting aneurysm of seventeen days' duration, with survival after surgical treatment, is presented. The simultaneous double intravenous method of opacification of Robb and Steinberg is thought to be safe, simple and adequate for the demonstration of dissecting aneurysms. We have stressed the importance of confirming the clinical diagnosis of a dissecting aneurysm by aortography previous to surgery. A dissecting aneurysm can be properly diagnosed, demonstrated and adequately treated in other than large institutions.

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Doctor's Own Words May Prove His Negligence

Statements made by a gynecologist to a patient and her husband after an operation were sufficient to provide expert evidence of negligence in diagnosis to submit to a jury. A dismissal of the patient's damage suit for lack of evidence was reversed on appeal by the Oklahoma Supreme Court.

Consulted by the patient, the gynecologist made tests and determined that she was not pregnant but has a tumor which should be removed immediately. Upon operating, however, he found that she was, in fact, pregnant. The patient testified that, after the operation, the gynecologist said to her, "I'm sorry, I should have made more tests on you." Her husband testified that the gynecologist said, ". . . this is a terrible thing I have done, I wasn't satisfied with the lab report, she did have signs of being pregnant. I should have had tests run again, I should have made some other tests. I'm sorry."

Although there was no expert testimony that the gynecologist was negligent in making his diagnosis, the appellate court held that the testimony as to his admissions was sufficient to go to the jury. Two justices dissented, stating that, although the gynecologist recognized that he had made a mistake after the operation, his statements did not amount to admissions of negligence.—*Greenwood v. Harris*, 362 P. 2d 85 (Okla., May 31, 1961)

Benign Gastric and Duodenal Ulcer

A Multi-Complex Disorder

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CONSIDERING the benign ulcer, gastric or duodenal, as a single etiological disease is no longer tenable. Accumulative studies, as well as clinical evidence, has convincingly demonstrated the co-existence of a number of abnormal pathologic and physiologic changes. Because of such findings the ulcer must be looked upon as a multi-complex disorder which may be instigated by one or more etiologic factors. It would seem inadequate, too, if in therapy attention is directed solely toward a single cause.

Currently, the theory of gastric hyperacidity is rather commonly accepted as the major malfactor behind the etiology of the ulcer. Because of such single accepted theory the ulcer is generally being treated primarily through medical or surgical intervention in methods aimed at reducing or removing the acid content or portion of the stomach.

Of interest, however, is the number of current failures in the realm of medical therapy. It is alleged by many prominent authorities that 15 to 20 per cent of all those who develop an ulcer will ultimately develop a chronic state; that the others will heal because of or in spite of prevailing therapy. It is in the chronic group that the antacid therapy fails to follow a consistent or dependable course. Recurrence, non-healing, intractability, complication, and a guarded prognosis are all too common.

Surgery has its troubles too. The recurrent symptoms, stomal ulcers or the various postoperative complications are being rationalized in many ways such as gastritis, insufficient stomach removed, incomplete vagotomies, wrong type of gastrointestinal continuity, et cetera. This merely attests to the fact that though surgery is often helpful and necessary in cases of obstruction, perforation, uncontrolled bleeding or marked intractability, it is not predictably certain of a satisfactory end result when used as an elective routine procedure.

Hyperacidity, which may play a part in the formation of the ulcer, is apparently not the only offender. It cannot, for example, account for the localized character of the ulcer, nor does it explain the ulcer in stomachs that are relatively free of acids. In fact, there are many clinical instances of cases with proven ulcers, in which foods or alkalies do little good in relieving the symptoms—oftentimes aggravating them instead. We must, therefore, take a broader approach to the benign ulcer problem and attempt to evaluate the significance of the various other factors and changes that are present.

Based upon clinical experience, roentgenologic, experimental and recent pathologic studies, abundant evidence presents itself to demonstrate clearly the fact that the ulcer is a multi-faceted disorder. Speaking in terms of etiology alone will overlook other pathologic conditions that might be concommitantly associated. The ulcer problem, too, in therapy must include consideration of the pathologic changes present, as well as the etiology. Nor does the problem end at this point, either. For, as consistently shown by x-ray studies, abnormal motility is frequently associated. It would seem logical therefore to expect inadequate results in therapy if any one or several of these conditions were left unresolved. The knowledge of the pathologic, etiologic, and abnormal physiologic forces behind the production of the benign ulcer is of upmost importance. Let us review such findings.

Pathological Consideration

Study of 100 resected stomachs performed for gastric and duodenal ulcers, both grossly and microscopically by the author,[1] plus the results of 600 stomachs by Magnus[2,3] and work by European investigator Alfonso DeLaFeunta Choas[4] of Madrid has revealed the following information:

1. *Lymphocytic Infiltration.*—Nearly all stomachs resected showed vast infiltration of lymphocytes around the blood vessels, ulcer bed and especially the mucosa where gastritis was associated.

2. *Eosinophilic Cell Infiltration.*—A number of cases showed extensive eosinophilic infiltration.

3. *Necrosis.*—Microscopic examination revealed many instances of endarteritis obliterans (closure of

the endarteries), although the venules were loaded with blood cells.

4. *Edema.*—The mucosa was in most cases edematous involving the ulcer bed, the surrounding mucosa and submucosal layers.

5. *Cicatrization.*—Large number of fibroblasts and scar tissue cells were noted in many cases, though healing was incomplete.

Comment

Lymphocytes Usually Indicate a Chronic Inflammatory State.—The latter may arise, however, not only from mechanical, chemical, or thermal irritants, but from bacterial infections as well. There is a tendency to believe that the hydrochloric acid in the gastric juice is capable of destroying all pathogenic bacteria entering the stomach. This is far from the truth, as experimental work has shown. The existence, too, of pus and pyogenic membranes as seen grossly on a number of resected stomachs likewise indicates bacterial involvement. Of course aseptic material such as croton oil, turpentine, and gastric acidity (?) may produce suppuration, but in light of the limited area of ulceration penetration, posteriorly or anteriorly to the surrounding organs, and the spread to the lymph nodes in the adjacent areas, it would seem unwise to overlook a mucosal or submucosal bacterial invasion.

Illustrative Cases

J.N., aged thirty-five, had a long history of irregular episode of indigestion and dyspeptic symptoms. X-ray studies some while back revealed the presence of a duodenal ulcer. The usual ulcer diet (Sippy's), anticholinergics, sedatives, alkalies, hospital rest and care failed to relieve his distress. Inclusion of an antibiotic (Mysteclin) provided an almost dramatic relief of symptoms and the patient felt comfortable for the first time in months.

J.R., aged twenty-nine, suffered from a severe deviated septum and hypertrophied turbinates. There was a constant postnasal drip. J.R. had to expectorate frequently, and upon many occasions swallowed some of the discharge. He developed a duodenal ulcer which recurred from time to time. On advice he had the nasal condition corrected by surgery. He has been free of gastrointestinal pain and distress now for a number of years.

Smith and Rivers[5] cite the following case:

A five-year-old-girl was seen because of a bleeding duodenal ulcer. She had an associated acute tonsillitis. Gastric acidity was not unusual and a study of peptic acitivity was normal. The tonsils were removed and cultures made from them were injected into experimental animals. Multiple acute ulcerations and submucosal hemorrhages promptly developed in the gastro-intestinal tissues of these animals. The patient was placed on a bland diet and had no further recurrence of her hemorrhage.

Eosinophilic Cells Usually Indicate an Allergenic or Parasitic Reaction.—Endemically we are not too greatly concerned with parasites, but the possibility might exist and consideration of this factor should be maintained. On the whole, however, strong attention must be directed to the presence of an allergenic reaction. Some reactions may be so severe as to send the patient into anaphylactic shock. Walter Alvarez[6] describes such a case in which a woman patient went into complete collapse following the ingestion of Roquefort cheese hidden in a salad. He mentioned cases, too, of lesser severity of gastric or intestinal distress which cleared simply by omitting the offending substance (when identified) from the diet of the patient.

Distress usually arises from one food allergen. In many instances a multiple number of food sensitivities may be present. Drugs consumed orally or taken by injection may be similarly involved. Inhalant pollens may play a part. The degree and site of reaction are variable and dependent upon the region and type of tissue involved. Thus chelitis, stomatitis, canker sore, apthous ulcers or blebs may be the result of a food or drug taken orally. I have an epileptic patient who suddenly developed a hypertrophic gingivitis after taking diphenylhydantoin sodium (Dilantin) harmlessly for many years. Withdrawal of the medication gave complete relief. Cyclic vomiting, severe cardiospasm, or pylorospasm may follow the ingestion of a specific food or a hypodermic injection. I have witnessed a severe shock-like reaction, associated with epigastric distress, in a patient who had received a small amount of meperidine (Demerol) and another case following the ingestion of milk.

Gastro-intestinal hypersensitivity to foods or drugs is a definite entity in the ulcer formation that is not to be minimized. Of great importance, therefore, is the need to realize that besides gastric or intestinal spasms, local anaphylactic irritation and ulceration is possible. And like those individuals who develop hypersensitive spots in the skin known as the Arthus reaction, so is it possible for those whose shock organs are in the stomach or duodenum to form a local anaphylactic spasm accompanied by edema, bleb, pain, and some bleeding in that area.

Kern and Stewart[7] were among the first to suggest a peptic ulcer-allergy relationship. Since then many others followed illustrating this association with specific case studies. L. P. Gay[8,9] writes about one of his patients as follows:

Miss G.P., aged twenty-one, had ulcer symptoms for two years, hunger pains relieved by soda-bicarbonate, night pains requiring food or alkalies. Two years before dyspeptic symptoms her appendix was removed because of right lower quadrant pains. Gastric analysis revealed a marked hyperacidity and x-ray showed a markedly deformed duodenal cap. Patient was put on a conventional ulcer diet consisting of milk, eggs, cereals, gruel, custards with frequent feedings and administration of alkalies. Instead of improving, the patient's symptoms became aggravated. She experienced much vomiting. Removal of wheat, eggs and milk from her diet gave almost instantaneous relief and she has remained well for over two years.

This illustration is not an isolated one. Numerous other examples were given.

In my own experience, two cases were particularly dramatic.

D.O., aged fifteen, presented himself because of fainting spells, marked pallor, tarry stools for about one week although epigastric distress was present for over a year. He stated that milk and foods gave him temporary relief, discomfort returning one or two hours later. He was hospitalized and x-ray studies revealed an active duodenal ulcer. Treatment was immediately instituted, blood transfusions, antispasmotics, Sippy diet, bed rest, vitamins, et cetera. His bleeding ceased and the patient was sent home to convalesce. He was seen at the office for the next five weeks, and although there was no recurrence of the bleeding he continued to complain of epigastric distress, relieved particularly by milk, only to recur in an hour or so. A food survey soon revealed that distress seemed to occur most consistently an hour after consuming milk. Discontinuing milk from the patient's dietary led to a dramatic cessation of epigastric distress. This was the first time he had been free of pain in over a year. His relief has continued for the past two years.

F.I., aged fifty-six, suffered from chronic bronchial asthma. He had developed a gastric ulcer a year previously. The ulcer healed under close medical care but distress seemed to recur at different intervals. No particular foods seemed to be involved. Once when his asthma became particularly bad he was given an intravenous injection of aminophyllin. That day he developed a typical ulcer syndrome, pains in epigastrium, bloat, distention and a recurrence of the ulcer. On questioning, it was found that he had been taking a tablet medication for years in order to combat his asthmatic episodes. Investigation revealed that the tablet contained aminophyllin. Eliminating this drug gave him dramatic relief for the first time in years. He has been free of distress now for over a year.

Necrosis Usually Indicates Ischemia.—This is a rather startling finding, particularly when the collateral circulation of the stomach and duodenum is so vast. Yet numerous pathological slides revealed a lesion similar to "endarteritis obliterans." European investigator, Alfonso DeLaFeunta Chaos,[4] of Madrid examined several hundred specimens by perfusions with Neoprine (India ink) and demonstrated a zone of intense ischemia. Microscopic sections revealed closures or occlusion of the arterioles in the ulcerative area although the venules were dilated and occupied with red blood cells. Boyd[10] believes peri-arteritis to be part of the inflammatory process. He also states that it is often associated with thrombosis. Needless to say, whatever the inciting cause, there exists an apparent closure of the end arteries with a fibrinoplastic or foreign protein-like substance. The flow of arterial blood is consequently hampered and adequate healing prevented.

Edema Is Usually Found in Association with Inflammatory Assaults.—It may, however, be in association with increased Na^+ or Cl^- retention. Hypoproteinemia may be a factor too. Since humans erroneously consider salt a neutral or inert chemical, which is far from the truth, attention must be directed to the danger of this substance's overuse. Coller[11,12] and his associates have shown that the stomach wall of the dog may become quite edematous if an excess of salt is given. Areas of local tissue damage or injuries are prone to select extra sodium ions, too, and consequently contribute to further edema. Furthermore, edematous tissue is apt to slough with repeated irritations or when exposed to hypertonic foods or fluids. It is also vulnerable to infections leading to acute or chronic degrees of local cellulitis.

Cicatrization without Complete Healing Suggests Some Form of Interference with the Process of Granulation.—All factors promoting such a situation must be considered, i.e., roughage in dietary, hyperacid producing, spicy, hypertonic foods, deficiency of vitamin C, K, hypoproteinemia, ischemia, and the like.

Etiologic Consideration

Determining the etiologic source is unquestionably of extreme importance. Despite voluminous recordings and research efforts, however, the exact cause for the ulcer still remains an uncertainty. Experimentally, scientists have convincingly demonstrated the relationship of ulceration to increased concentration of gastric acids and pepsin by their works on dogs. In the human being, however, though hyperacidity may play a part, we cannot be certain that it is merely a perpetuator or reactivator of an ulcerative condition already present from some other cause.

It is very likely that almost any factor (chemical, thermal, mechanical, or infectious) may have the capacity, in some individuals, to instigate the chain or

events leading ultimately to the chronic ulcer. Lowered mucosal resistance may be a possible reason why some individuals are more susceptible to gastric or duodenal irritation. Lowered mucosal resistance is associated with the viscosity of the mucus secreting glands. Greater viscosity means more protection against irritants. Aspirins, for example, are known for their ability to produce dyspeptic symptoms or hematemesis in many individuals, whereas others are distressed none at all. Alvarez and Summerskill,[13] investigated the relationship between massive gastro-intestinal hemorrhage and salicylate consumption. They found a majority of those bleeding had taken aspirin tablets within twelve hours of their hemorrhage. Occult blood loss in stools occurred during periods of salicylate consumption in 50 per cent of patients with benign ulcers. Undiluted alcohol, hot spicy foods, hypertonic salt foods ingested and certain drugs, may produce a gastric or duodenal erosion. Since many individuals can consume such foods or drugs with impunity, it must be assumed consequently that the others must have some localized loss of mucosal strength, or decrease in viscosity of the mucus secreting substance.

Chronic gastritis has been postulated with some credibility as being a forerunner to the ulcer. Although there is no evidence to substantiate this theory, proof exsits that most ulcers are concomitantly associated with localized or severely generalized forms of gastritis. It is very difficult to differentiate clinically from the symptoms presented between an ulcer and gastritis. An x-ray is necessary to help establish the diagnosis. Even then, several of the resected stomachs studied failed to reveal a gastric ulcer despite a diligent search by the pathologist (grossly and microscopically), although extensive gastritis was present. If gastritis cannot be considered as a primary source for the ulcer, it certainly must be included as a secondary associate.

Since Virchow's time, vaso-spasm has been proposed frequently as an important etiologic factor in the ulcer. However, the lesion in itself is not conclusively suggestive of a systemic vascular disease. Other causes such as inflammatory reactions, chronic infections, and ulcerative lesions may frequently lead to such a local arteriolar closure. Histamine local bleb may occur in the gastro-intestinal tract, too. Credibility is enhanced by the finding of eosinophilic cells microscopically in many stomachs resected because of an existing ulceration.

Factors such as stress, shock, over-fatigue, burns, neurogenic lesions, et cetera, have been known to lead to or to reactivate a benign ulcer. Curling's ulcer in children following burns and Cushing's writings recording ulcerations following lesions of the central nervous system are all too well known. There is the recent hypothesis that these conditions arise because ACTH is released from the pituitary gland which, in turn, activates the adrenals to secrete a steroid (cortisone) which, in turn, causes an increased hydrochloric acid content in the stomach. Hirschowitz,[14] however, through careful study refutes this theory by demonstrating that there is an associated decrease in the viscidness of the mucus substance lining the stomach wall. Though stress may initiate or reactivate an ulcer, it is my belief that it arises because the steroids produced, in response to an alarm reaction, have the capacity to cause a sodium ion retention and a potassium ion excretion. Increased retention of the sodium ion in the cell will lead to an edematous state. Consequently, a lowered mucosal resistance (edema of cells plus a lessened viscosity) is a possible complication.

Infections, toxins, et cetera, are known to initiate severe gastric distress. Although the bacterial growth is not as intense as in the intestinal area, the stomach and duodenal mucosa is not invulnerable to various pathogenic invaders. Hydrochloric acid is not completely bactericidal. There are many organisms whose growth, once established, is enhanced in an acid medium.

Abnormal Physiological Consideration

The radiograph and fluoroscope have been extremely valuable in demonstrating the existence of tone, motility, and spastic changes in the stomach and duodenum in association with ulcerative disease. Hypertonia is stated to exist if there is more than five peristaltic waves appearing simultaneously in the stomach. Irritability of the duodenum is indicated by hypermotility, and spasm of the stomach or duodenum is recognized by a persistent contraction. Lately the term pyloroduodenal spasm has come into use. This indicates that most likely the antrum, pylorus, and duodenum act more like a unit and the entire area is spastic at one time. In the stomach, if there is an ulcer present, there may be a spastic area diagonally opposite the irritated site. Pyloroduodenal spasm is most likely related to an inflammatory process in the immediate area.

Changes in motility or the appearance of spastic reactions are not always only indicative of ulcer disease. Neurogenic, reflex stimulation or allergic manifestation (without bleb formation) may produce such

a response. Whereas hypermotility is not usually painful, hyperspasticity is definitely so. Consequently many individuals may suffer intense epigastric distress yet have no organic changes. When an ulcerative condition is present it is often difficult to evaluate whether the pain is due to the ulcer itself or to the corresponding gastric or pyloroduodenal spasm that may be associated. Elimination of the spasm and hypermotility must be effected, however, for like the anal ulcer, control of the pain and healing is difficult unless such spasticity is corrected.

Therapeutic Objective

Since it is practically impossible with present-day facilities to determine the total or exact makeup of the chronic benign ulcer, it is apparently necessary to treat all cases as if they hypothetically possess any one or all of the factors in the etiologic, pathologic, and physiologic abnormalities previously discussed. Failure to follow such a plan may invariably leave one or several factors unchanged, contributing in many instances to an ineffective or inconsistent end result.

Therapeutic Management

Pathologic changes, as previously discussed, suggest the presence of an allergic state, chronic infection, possible *Endamoeba histolytica* infestation, endarteritis obliterans (of the ulcer wall), edema, and a vitamin C and/or hypoproteinemia. Measures must include means whereby all these factors are corrected.

Consideration is first directed to the allergy problem. If no specific relationship is apparent then the patient must be placed automatically at the onset of therapy, on a milk, egg and wheat-free diet. This statement may be relatively revolutionary inasmuch as current treatment is singularly dependent upon these latter foods. Many investigators, however, concur in the fact that the common offending allergens are most often wheat, milk, and/or eggs in that order. There are other foods, of course, or drugs, too, whereby the hypersensitiveness may produce the anaphylactic spastice focal reactions or acute exacerbation of the ulcer. Citrus fruits, coffee, chocolates, fish, various condiments, i.e., are frequent offenders. When identified or suspected, then they too must be eliminated. Those who are allergic to milk and must remain on a milk-free diet should have a substitute for it in order to prevent a calcium deficiency. Soy bean preparations are satisfactory, otherwise calcium wafers or tablets plus a vitamin D supplement to aid assimilation, may suffice.

Individuals who have gastro-intestinal allergy unfortunately do not usually give an immediate or a violent reaction. In fact, offending foods many times have a tendency to relieve the symptoms present when first ingested only to reach a state of anaphylactic spasticity one or two hours later. Similarly, the hypersensitive food or drug may be taken at intervals with complete impunity, accounting perhaps for the recurrent seasonal distress in some individuals. To explain the variable symptomatology, L. P. Gay[8,9] states "that when the reaction is not immediate, the gastric acidity is reduced at first by the food only to produce the anaphylactic spasm or pain an hour or two later." "Impunity may occur," he continues, "when there is an exhaustion of the reacting bodies to the allergenic foods automatically terminating the attack. When these bodies re-accumulate to the reacting level, the attack recurs. Withdrawal of the offending bodies from the dietary for a period of three to six months will permit ingestion of the offending substance without distress for a while, that is, until the antibodies again accumulate to a reacting level."

Antibacterial treatment is next in order. I have found the tetracyclines useful. To avoid a rectal monilial overgrowth, tetracyline may be combined with nystatin. If *B. coli* is suspected, a "sulfa" preparation is helpful, provided the patient is not allergic to the drug. Upon many occasions the use of foreign protein injections have given beneficial results. Sterile milk, proteolac, histidine monohydrochloride injected intramuscularly in appropriate doses are of extreme benefit at times.

If amebiasis is suspected, though not conclusively proven, a short course of an oral or intravenous amebicide may be tried. I have used Emetine hydrochloride 0.06 gms. intravenously on alternate days for six to twelve doses. This drug is not only effective against amebas but also seems to destroy a number of the secondary bacterial pathogens present. Of course if there is an arsenical idiosyncrasy the drug should not be used or immediately discontinued.

Necrosis (local enarteritis obliterans) is the next problem in order. In therapy I have successfully used the various proteolytic enzymes presently available such as Chymar (Armour) or Parenzyme (National Drug). They can be given intramuscularly as an aqueous suspension on alternate days for a number of weeks. The oily solution is avoided because of the danger of a skin sensitivity. Sublingual or oral tablets may be given beneficially afterwards.

Because of the prominent part edema plays in the pathological make-up of the ulcer, all the factors which may irritate or promote edematous tissue must be

carefully reviewed and effectively controlled. Harsh, gritty, hypertonic, or spicy foods must be avoided of course. And since hypoproteinemia and sodium and/or chloride (in excess) may lead to further edema, these two situations must be controlled. A high protein diet, chopped or grated in the earlier part of the treatment to a well chewed dietary low in salt is indicated. No one would conceivably pour a hypertonic salt solution upon an open wound yet this is what is happening when the salt intake is left to the uncontrolled and injudicious taste of the patient. Since hypertonic salt solutions are quite capable of not only irritating damaged tissue but of promoting further edema, likelihood of a cellultis and, of course, failure in healing, will be likely. I have found that a maximum intake of 1200 mg. of Na^+ is quite safe under physiologically stable circumstances. However, if marked perspiration occurs because of hot weather or from excessive muscular activity, an increase in salt intake is essential. Similarly, persistent vomiting or diarrhea, gastric, intestinal suction or a fistulous drainage, if present, will need an increased but calculated salt intake in order to maintain electrolyte equilibrium. On the other hand, if steroids are necessary or in times of stress, or following surgery, severe burns, emotional tensions, and the like, the ulcer patient must be immediately placed on a restricted Na^+ or Cl^- intake of approximately 600 to 800 mg. daily. For under these circumstances the body tends to retain sodium and to excrete potassium.

Faulty healing, excessive scar formation, insufficient granulation formation, may exist or persist because of a vitamin C deficiency, or perhaps from gastric hyperacidity, and spicy or gritty foods. Consequently, a dietary should include a high vitamin C intake. The tablet is sufficient since many individuals are allergic to the citrus fruits. Antacids may be utilized but in a limited daily intake. Preference is given to the liquid form of aluminum hydroxide. For those who are constipated, Maalox, Amphogel, or Gelusil is used. Two teaspoons in water between meals and at bedtime is sufficient. Its use is not only for the neutralization effect but the coating one as well. For those who have a tendency to loose stools, Basojel in the same amount is used. On a number of occasions, allergic reactions have occurred following the use of antacids. If such a situation occurs, antacids by all means must be discontinued. Care, too, must be exercised for, after excessive alkali usage, renal calculi or alkalosis may occur.

Abnormal physiologic manifestations as hyperspasticity, hypermotility and hypersecretion are invariably constant companions in association with most ulcer cases. It is assumed that the parasympathetic (vagus) chain is highly irritable under these circumstances and is consequently responsible for these irregularities. Failure to control this situation may account for the presence of distressing pains (even though the ulcer may be healed). It may also lead to various digestive disturbances in the lower intestinal tract because of the rapid propulsion of partly digested foods from the stomach proper. There is little question that some form of anticholinergic medication is indicated. The number of drugs in current use is legion. It would be too voluminous to include them all in this article. The oldest form of medication and still somewhat effective is of course, the tincture or powered extract of belladonna. There are many patented product preparations on the market, a number of them in combination with phenobarbital or other sedatives. The variety and amounts used can be found listed in the *Physician's Desk Reference.* I have found prochlorperazine as the dimaleate (compazine) given as a tablet 5 mg. q.i.d. (as a spansule 10 to 15 mg.) taken morning and night, or isopropamide as the iodine and prochlorperazine as the dimaleate (Combid) to be of decided effect for its anticholinergic and antispasmodic ability. The side effects are minimal, except for occasional drowsiness.

Though the immediate results of effective therapy in the benign ulcer may be good with prompt relief of symptoms and complete healing of the ulcer, little satisfaction can be maintained if recurrences are frequently encountered. The possibility of a lowered mucosal resistance must be remembered, and continued dietary discretion followed.

All possible sources contributing to repeated bacterial infections must be eliminated. Conditions such as sinusitis, deviated septi or enlarged turbinates, associated with marked post-nasal drainage, chronic hypertrophic tonsillitis or adenoiditis, chronic enteritis, et cetera, should receive the proper medical or surgical correction whenever possible.

All allergenic foods or drugs must be searched for. In many instances the individual may be allergic to two or more ingredients. Drugs, similarly, must be suspected, particularly any which may have been taken previously for a long period of time with impunity. This may even apply to the various antacids consumed. One must remember too that the allergen can at intervals be taken without giving symptoms.

During unusual periods of stress sedation is necessary, but equally important is the need to place the

individual on a low salt, non-irritating bland diet. Liquid antacids may be used in small amounts for their protective coating.

Summary

Acceptance of the theory of gastric hyperacidity as the sole malfactor behind the pathogenesis of the benign ulcer, gastric or duodenal, is no longer tenable. The ulcer is a multi-faceted disorder. The factors that are involved in this disease include the following: (1) allergic or parasitic reaction, (2) chronic bacterial infection, (3) local fibrinoplastic closure of the arterioles, (4) edema (Na^+ and/or Cl^- excess or hypoproteinemia), (5) faulty healing (vitamin C deficiency, hypoproteinemia, et cetera), (6) hyperspasticity, hypermotility, and (7) lowered mucosal resistance.

Because of the strong allergy element in the pathogenesis of the benign ulcer and the fact that milk, wheat, or eggs stand relatively high as the most common antigens, the patient will by necessity have to be placed on milk, wheat and egg-free diets, at the onset of treatment, at least, until the exact offending ingredient or ingredients can be identified. This change is rather startling inasmuch as these foods currently form the basic ulcer dietary.

Conclusion

Treatment of the benign ulcer cannot be confined to a single etiologic force. Emphasis must be directed to the fact that the ulcer is a complicated syndrome involving more than hyperacidity as is commonly believed today. The suggested broader-range treatment, when adequately applied, will be effective particularly for those who have not responded well on the widely-used Sippy or other antihyperacidity programs. Under this enlarged program of treatment, pathologic, abnormal physiologic and etiologic considerations all come under careful scrutiny. Only by treating and thereby controlling the abnormal forces in their entirety can there be hope of a more consistent and prognostically reliable outcome among benign gastric and duodenal ulcer patients. It would behoove us to discard the term "peptic" inasmuch as the word is misleading and falls far short of identifying the actual disease process.

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Ulcer

In 1935, three out of every 1,000 Americans were ulcer victims. In 1960, 14 out of every 1,000 or 3 million Americans were victims, a 400 per cent increase. In that year, the ulcer had cost the U.S. 12 million workdays, 500 million dollars and 10,000 deaths.

All of this indicates that the ulcer is not a "glamorous" disease, not even a simple nuisance disease. "It's a dangerous, painful and costly ailment that deserves far more realistic public attention and understanding than it has ever received."—C. J. TUPPER, M.D., Assistant Dean, University of Michigan Medical Center.

Acute Renal Failure

With Particular Emphasis on Management During Infancy and Childhood

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ACUTE RENAL FAILURE with associated anuria can occur at any age. The syndrome is only occasionally associated with lesions that cause irreversible renal damage, such as bilateral occlusion of the renal vessels or cortical necrosis. Most acute renal failure cases, however, are due to a reversible lesion, acute tubular necrosis. This may result from such insults as heavy metal or carbon tetrachloride poisoning as well as shock, crush injuries, or mismatched blood transfusions. Among children, one of the most frequent causes of anuria is acute glomerulo tubular nephritis.

The physician who is confronted with the sick child who has diminshed urinary output must determine at the onset whether the oliguria is due to obstruction, and if it is not, whether it is due to dehydration or due to actual renal insufficiency. In order to rule out the presence of obstructive uropathy, the physician should employ a uretheral catheter and might ultimately use the cystoscope and ureteral catheters, for complete obstruction can create the illusion of renal failure even when the kidney is capable of producing an adequate urinary output.

In the patient free from obstruction, the physician must determine whether the oliguria is due to dehydration or to renal injury before any treatment is instituted, for in dehydration fluids are indicated whereas fluids in renal failure may endanger the patient's life. Dehydration is manifested by signs of decreased tissue turgor and a concentrated urine. In renal failure, the urinary specific gravity is invariably low. One cannot overemphasize in any case of low urinary output the necessity to rule out urinary obstruction and to determine the specific gravity of the urine.

Once the anuria has been established to be renal in origin, the treatment is essentially the same in all cases, for the physician often at that time cannot determine whether the child has an irreversible condition or whether he is suffering from acute tubular necrosis which, if properly treated, should rarely be fatal. The cause of death in these cases is usually due to overhydration, hyperkalemia or superimposed infection and it is imperative that a program of management be followed that will prevent or minimize these serious complications.

General management during the anuric phase is directed toward: (1) Accurate management of fluid balance. (2) Prevention of infection. (3) Prevention of hyperkalemia. (4) Maintenance of adequate caloric intake.

Fluid Balance.—The most frequent complication of acute renal failure is over-hydration and drowning of the patient. When the physician is called to see this sick patient with fever, vomiting, diarrhea, and low urinary output, his first impulse is, too often, to hydrate the patient. In most febrile diseases this is good therapy, but if the child is suffering from acute renal failure the excessive administration of fluids can be fatal. Better that the physician obtain some urine and, if need be, delay the fluids until a diagnosis can be established.

In acute renal failure it is imperative that fluids be restricted. An adult needs approximately 400 cc. per day to cover for insensible loss and a child needs proportionally less—20 to 30 cc. per kilogram per day is adequate. In addition, fluids and electrolytes lost by vomiting and diarrhea should be replaced volume for volume. Under this program there should be a progressive daily weight loss or else fluid restriction has been inadequate.

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Infection.—Susceptibility to infection is markedly increased in the uremic patient. A program of isolation technique is immediately established. Ideally, a recently scrubbed private room is used, and gowns and masks are worn by medical personnel in attendance. Frequent examinations for the early detection of clinical infection must be made and, if found, treated with the antibacterial drug of choice.

It is important to realize that many of these drugs are normally eliminated by the kidneys. In the presence of renal failure, they may rapidly build up to toxic blood levels, therefore, dosage must be reduced. For example, streptomycin levels build up rapidly and persist. This may cause irreparable eight nerve damage.

Hyperkalemia.—During the anuric phase of acute renal failure, potassium retention occurs and often causes serious and rapidly fatal myocardial complications. Potassium intake is therefore completely restricted. Daily serum electrolyte determinations and electrocardiagraphic monitoring aid in the diagnosis and therapy. There are typical E.C.G. changes associated with hyperkalemia. Early potassium intoxication shows high spiking T-waves, and as the condition progresses, loss of the P-waves and spreading of the QRS complexes.

Cation exchange resins are valuable in helping to maintain safe potassium levels and can be used either orally or as retention enemas. However, these are often poorly tolerated, especially in children, and use of the artificial kidney may become necessary to correct these imbalances.

Frequently, there are other electrolytic aberrations such as an acidosis due to accumulating breakdown products. This usually does not require specific therapy. Often serum sodium levels are found to be low, but usually this is a result of over-hydration and only rarely is there a necessity for sodium administration during the anuric phase.

Caloric Intake.—By providing a maximal caloric intake in the form of carbohydrates and fat, the breakdown of the patient's body protein is diminished, and thereby the release of potassium is decreased. This also serves to slow down the formation of nitrogenous retention products and to avoid ketosis. Preferably, the calories can be administered orally in the form of ginger ale and Karo syrup, rock candy, and butter balls, but if necessary, can be given intravenously in the form of hypertonic glucose.

A progressive anemia is consistently encountered in the course of acute renal failure. This is usually well tolerated; however, it is refractory to therapy and stabilizes at a hematocrit level of 25 to 30 per cent. If transfusion becomes unavoidable, it should be given as fresh packed cells in small increments to minimize the exogenous potassium and fluid administration.

Not infrequently, the patient's condition deteriorates and even the best conservative program is inadequate and use of the artificial kidney becomes necessary. In this method, the blood is circulated outside of the body through a cellophane membrane which is in contact with a standardized bath. Dialysis takes place and the retention products, such as urea, creatinine, and metabolic acids are removed. The plasma electrolytes can be adjusted and over-hydration can also be corrected by ultrafiltration.

Recent medical literature would suggest that the indications for extra-corporeal hemodialysis are increasing, and that most of contra-indications are being overcome. As experience with the artificial kidney has increased, it has become obvious that there is virtually no need for mortality from its use, nor is there any significant morbidity when dialysis is employed properly by a well-trained team. Indeed, the attitude toward its employment is changing from one of using dialysis as a last resort, to the point where today O'Brien and Teschan have even been using daily prophylactic dialyses of patients with acute renal failure before the uremic syndrome develops, and they have reported excellent results.

Last year, the University of Michigan Medical Center was faced with an interesting case of anuria in a four-month-old infant. Conservative methods proved to be inadequate and it became apparent that some sort of dialysis was indicated; however, in view of the fact that no child this young had ever been treated with extra-corporeal hemodialysis, it was deemed that the more conservative peritoneal dialysis be tried. This was attempted on two occasions but was technically unsatisfactory because of failure of return of the dialysate from the infant's peritoneal cavity.

The child's condition progressively deteriorated and it was apparent that the only possible hope for saving the life of this infant was extra-corporeal dialysis. Two dialyses were subsequently carried out and were, from a technical and chemical viewpoint, highly successful; yet the child eventually expired.

Autopsy revealed why dialysis had failed to salvage this infant. The anuria was due to bilateral cortical

necrosis, an irreversible condition—one of the rare causes of acute renal failure.

This infant was the youngest human ever run on artificial kidney and the efficacy and safety of this modality was thereby satisfactorily demonstrated. Since that time, extra-corporeal hemodialysis has been used in even the youngest patients when indicated.

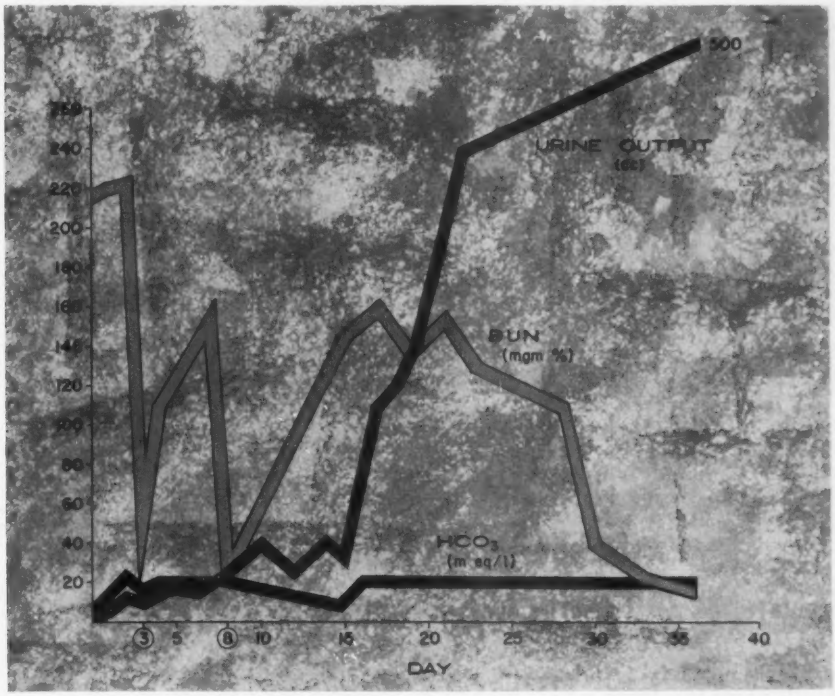

Fig. 1. Graph representing hospital course of eleven and a half month old acute renal failure patient. Note relationship of blood urea nitrogen, urinary output and serum bicarbonate to extra-corporeal hemodialysis on days three and eight.

A recent example was an eleven-and-one-half-month-old girl who was admitted with a three-day history of irritability followed by lethargy, rapid respiration, and failure to void for forty-eight hours. Two weeks prior to admission she had been seen in the Well Baby Clinic and found to be normal in all respects.

On physical examination, the child was pale and lethargic. Vital signs were normal except for rapid respiration. No abdominal masses were palpable.

Emergency blood chemistry studies revealed a blood urea nitrogen of 220 mg. per cent with associated acidosis. Three cc. of urine obtained by catherization had a 3-plus albuminuria and a specific gravity of 1.015. Blood hemoglobin was 5 gms.

During the first twenty-four hours, a total of 1016 cc. of fluid was given as whole blood and electrolyte solution. This corrected the acidosis but a 1-pound weight gain occurred and she became increasingly lethargic; she had been over-hydrated.

Intravenous pyelograms failed to demonstrate the kidneys and therefore retrograde catheterization of the ureters and pyelograms were made. These studies demonstrated that there was no obstruction. This was done under local anesthesia to avoid the added insult of general anesthesia. After observation for two to three days her condition deteriorated, and it was elected to perform hemodialysis. Because her condition was extremely critical, we were embolden to do this.

Following dialysis, the patient's general condition improved. The blood urea nitrogen fell from 222 mg. to 49 mg. per cent, but slowly elevated again over the next seven days. The urinary output remained low, averaging 15 to 20 cc. per day. With the elevation of the retention products as indicated by the blood urea nitrogen, the child's clinical condition again deteriorated; and one week later another successful dialysis was performed. Subsequently, the blood urea

nitrogen gradually fell to normal and the urinary output increased to 500-600 cc. per day.

In regard to the technique of dialysis in infants and children, numerous problems are encountered. The main concern is the actual circulatory dynamics. The majority of dialyses at the University of Michigan Medical Center are performed with the Kolff Twin Coil Kidney. This unit requires approximately 1000 cc. of blood to prime the coils and tubing; however, during the dialysis of infants, one of the coils can be excluded from the circuit, thereby reducing the necessary amount of priming blood to 500 cc. Since the child's blood volume in this case was calculated to be about 700 to 800 cc., during dialysis the ratio of blood volume of the infant to that of the coil was slightly more than one to one. Any sudden shifts in blood volume could, therefore, have a profound and deleterious effect on the circulation of the child.

In addition, the size of the infant is such that the selection of vessels to use for the inflow and outflow of blood from and to the artificial kidney becomes a problem. In the adult, the radial artery and cephalic vein at the wrist are generally used. In the infant, the greater saphenous veins at the level of the fossas ovale are selected because of their size and accessibility. Bilateral cut-downs are performed and the inflow catheter passed into the vena cava to the level of the thoracic diaphragm. The outflow catheter is passed to the level of the confluence of the common iliac veins.

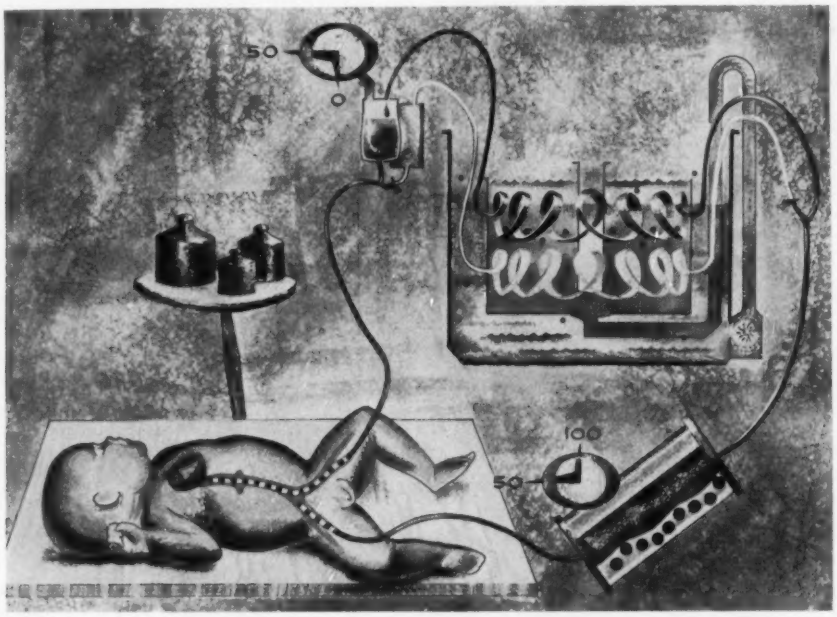

Fig. 2. Diagram of technique and circulation of extra-corporeal hemodialysis of infants. Note scale for determining constant weight, the isolation of one coil from the system, and the position of the inflow and outflow catheters. A low coil pressure is maintained ranging from 0 to 50 mm. of mercury, and blood flow ranges from 50 cc. to 100 cc. per minute.

With the child on a sensitive scale, weight is observed continuously throughout the procedure so that any sudden shifts in circulating blood volume can be immediately discovered.

The patient is given 1 mg. of heparin per kg. intravenously and 5 mg. are added to the priming blood. The dialysis is started with very low flow rate and the coil pressure is maintained from 0 to 50 mm. Hg. In the present instance, no untoward effect resulted and gradually the flow rate was increased to 80 to 90 cc. per minute. The child's blood presure, pulse, and respiration remained stable. The 100-liter normal bath was changed once during the three-hour dialysis run.

This last infant has apparently completely recovered from a period of over twenty-one days of essentially complete anuria. Unfortunately, we do not know the etiology of this child's acute tubular necrosis; however, it seems unlikely that she would have recovered if the

artificial kidney had not been employed. She left the hospital only a month ago with a blood urea nitrogen of 15 mg. per cent and appeared clinically healthy.

In conclusion, it has been demonstrated that the artificial kidney can be used with safety even in the youngest of infants when properly employed. Clinical improvement is virtually certain in all cases, so if there is any question regarding the reversibility of the underlying renal lesion, the uremic patient should be given the benefit of the dialysis. Extra-corporeal hemodialysis is not a dangerous procedure to be used as a last resort, but is rather a valuable adjunct in the management of acute renal failure in any age group.

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The Poliomyelitis Situation

Regardless of the proposed long-range advantages of oral live virus vaccine over parenteral killed virus vaccine, we have a continuing emergent situation to deal with in this State.

The results with the Salk vaccine have been good, and it is available for use. The Sabin vaccine tests well, but it is not presently available in quantity.

Pre-Salk, there were 864 cases of paralytic poliomyelitis in upstate New York in one year (1954). In 1960, there were 135 cases, almost 50 per cent of these in children under nine years of age. Sixty-one of last year's cases did not have even one injection of vaccine, and only 40 had three or more doses.

Poliomyelitis is now a disease primarily of unvaccinated babies, unvaccinated preschool children, and unvaccinated male adults. We need to concentrate on these groups, using all the lay influence we can get from voluntary agencies, the press, and other means of communication.

The hard core of the intransigent can never be reached, but the ignorant, the careless, and the indifferent can.

It is the physician's duty as guardian of the public health to do all in his power to broaden the base of poliomyelitis vaccination.

The accepted schedule for the Salk vaccine remains unchanged—two injections within a month, a third seven months later, and a fourth one year after the third.

Sigmoidoscopy in Cancer Detection

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OUR PRESENT CONCEPT of cancer cure is based for the most part on early observation and diagnosis of the neoplastic lesion. Statistics published by the National Office of Vital Statistics[1] disclose that, when considering both sexes equally, more people die of colorectal neoplasm than from any other form of malignant disease in this country. When we consider that 65 to 75 per cent of all colorectal cancers can be felt with the finger or visualized through the sigmoidoscope it can be clearly concluded that physicians are ignoring a most important tool in cancer detection. Furthermore, it is only reasonable that considering the above statistics a physical examination of a patient that does not include a sigmoidoscopic examination must be rated as incomplete.

The reasons given why physicians do not do routine sigmoidoscopic examinations when performing a physical examination are twofold: (1) lack of proper equipment and (2) the erroneous idea that sigmoidoscopic examination is highly technical and time-consuming. These reasons when looked into are easily shown to be ill-founded and not properly based on fact. The amount of equipment needed is minimal. Actually all one needs is a standard 25-cm. sigmoidoscope with an electrical source, a suction unit, and an accessible toilet. The standard flat examing table is completely adequate and certainly more comfortable for the patient than a tilt type of table. The technique of sigmoidoscopy is simple and is not dangerous in any way if reasonable care is exercised. Complications remain nil if the following cautions are observed: (1) The scope should never be advanced without complete visualization of the bowel lumen at all times. (2) Excessive air should not be pumped into the bowel placing the bowel wall under undue tension. (3) Force should never be used in advancing the scope.

Preparing the patient for sigmoidoscopic examination requires little time or effort on the part of the patient or the physician. The patient receiving a thorough physical examination should be instructed when the appointment is made that a cleansing enema the night before and the morning of the examination should be taken. The small disposable type of Fleet's enema provides a convenient and thorough method of cleansing the bowel in the office. It is very important that the patient is thoroughly instructed about the mechanics of the sigmoidoscopic examination so that total co-operation can be obtained. The completeness of this endoscopic measure adds greatly to the total reassurance of the patient.

The attitude about and the reluctance toward complete anorectal examination could easily be changed if medical educators would place a greater emphasis on teaching medical students, interns, and resident physicians the significant place sigmoidoscopic examination plays in the total and complete examination of a patient. With more widespread interest and use of this particular tool of diagnosis, it is conceivable that the death rate from cancer could be substantially lowered.

The Author
JAMES P. MULDOON, M.D.

Reference

1. United States Department of Health, Education and Welfare, Public Health Service, National Office of Vital Statistics: Vital Statistics of the United States, 1955, Vol. II.

Doctor Muldoon is a member of the Active Staff, Ferguson-Droste-Ferguson Clinic, Grand Rapids, Michigan.

The Physician's Responsibility To the Community

The first responsibility of the physician is that of providing health information and good medical care for the people of the area in which he lives. He will also improve the stature of his profession by becoming genuinely interested in the various aspects of life in the community. This issue of THE JOURNAL is devoted largely to a series of articles which describe some of the projects already in operation in our state and we are hopeful they will be copied in other areas.

It has been said that physicians are too busy caring for patients to become actively engaged in community life. This may be true in some areas, but some of the busiest doctors I know find time to participate in some extra-curricular activity in which they not only serve the community but also their profession. Every physician, as a responsible, highly trained, and respected citizen, should take an active part in some type of activity for the improvement of the community in which he lives.

Those of us who are particularly interested in the care of older people should make every effort possible to see that proper facilities for good patient care exist in our area and that these resources are made known to those who need them most. It is surprising how often persons are found with chronic disabling illness, sitting in wheelchairs in their homes or institutions because of failure to use the many new techniques of treatment. As physicians it is our duty to keep our community informed of all the advances in medical science in order that the health of our older citizens will be maintained at the highest level possible.

Surveys have repeatedly shown that a considerable number of cases of undetected disease exist in every community and that these cases could be uncovered early if enough local publicity were given to the need of regular health appraisal examinations. I am sure local health departments would be glad to cooperate in providing screening techniques through chest x-rays, eye testing for glaucoma, and blood tests for diabetes. Cases with positive findings would then be referred to the private physician for evaluation. This procedure should only be done, of course, in lieu of a regular examination in the physician's office, which is always more desirable, but unfortunately many people never go to a physician except when they are ill. They have not been taught that regular visits to a physician are part of everyone's own health program and a very important kind of preventive medicine.

With the growing interest in Geriatrics, there has developed a renewed optimism about the medical care of the aged. Surgery is now being done with ease, which had been previously thought to be

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impossible, and has added years of comfort to many of our older patients. The improved outlook toward the psychiatric care of the mentally disturbed elderly patient is most gratifying and has prevented the final commitment of many so-called senile patients to state mental hospitals. Then, too, the efforts at rehabilitation of patients with chronic disabling illnesses have proved that our previous attitude of pessimism is no longer justified in those patients with a reasonably good potential. It is this type of knowledge that the community wants, and the physician is the logical person to disseminate this information.

In our efforts to help the older person adjust himself to the process of growing older, it is more and more apparent to some of us that some type of work is the key to a successful retirement. There are those people who seem to enjoy doing nothing, but they are certainly in the minority. Most of us need a sense of continued usefulness and an opportunity to work, if we want to. To that end, if some type of part-time work could be developed by the community for those people who want it, I am sure that some of the many illnesses growing out of loneliness, idleness, and boredom would be postponed at least until such a time when real physical disability prevented any meaningful activity. Work is an important aid in maintaining one's self-esteem and a sense of real value to the community. When these are lost, certain psychologic changes develop in the personality of the individual that we recognize as typical of the confused and senile patient. We must make an effort, therefore, to keep the older person active in the life and work of the community as long as possible. Here, again, it is the duty of the physician to inform the community of the urgent need of providing some type of work program for its older members. There is no substitute for useful activity.

If more physicians were actively engaged in some form of civic endeavor and were making a sincere effort to improve the health status of our citizenry, I am sure there would be less reason for criticism of the medical profession. At the present time, we are not held in very high esteem by a certain segment of the population. Most of the reasons given are not justified, yet we must admit some defects do exist. It seems to some of us, therefore, that the remedy lies largely in the doctor's own hands. We must use all the ingenuity we possess to remedy the defects instead of trying to convince the public that such defects do not exist.

A. Hazen Price, M.D.

Congratulations to Michigan Medicine

At this time of the year, the Annual Session of the Michigan State Medical Society is in progress. The officials and the various committees have prepared another outstanding three-day session of the Society devoted to the most recent, the most stimulating and the most comprehensive presentation of what is new in the whole field of medicine. Guest speakers have been brought to Grand Rapids from all parts of the United States and Canada. The best informed men who could be obtained have been or are being presented to the Society in the form of prepared papers, demonstrations, panels, symposia, moving pictures, and the spoken and the written word.

Each year as we attend these programs, mix with these educators and return home, we are impressed with the vastness of medical knowledge of which we as individuals can partake and marvel at, or can absorb and make part of our own ability to care for our patients. Programs and presentations this year have been well up to the standards set during the years with always the addition of some new item, the report of some new discovery or procedure. We only have to look back on a very few years to see what amazing progress the medical profession has been making each year.

New and Improved Pharmaceuticals

Well over 100 pharmaceutical and manufacturing representatives who produce the medication, materials, instruments and equipment which are being used in medicine have demonstrated their wares and have contributed to our practical education in the area of what to do for our patients after we have diagnosed their conditions. These representatives have shown us new drugs, new equipment which were unknown five or ten years ago and even two or three years ago. Ordinarily, a few new drugs are demonstrated to us each year which we can use in our treatment of patients, and many of them are rather expensive. Each pharmaceutical house, especially the larger ones, has whole scientific staffs at work doing research, trying to work out new methods, new drugs, new modifications. Occasionally, a completely new chemical is discovered after extensive searching by a staff of trained research men who have worked day in and day out for months and years before they discover one new and acceptable item.

We of the profession appreciate this situation. We appreciate the tremendous amount of work necessary, much of it commercially non-productive work. We can only imagine the amount of money tied up in the evolution of one or two pharmaceuticals.

This last year, we have had a sample—a very acute

sample—of another approach to this problem. In the past, the pharmaceutical houses have borne much of the expense of publishing this JOURNAL and others, including the *Journal of the AMA*. They pay for the advertising and for the exhibits at our Annual Session. This money must come from the sale of their products.

Just about a year ago U. S. Senator Kefauver established a committee of inquiry and investigation about drugs. He brought several of the drug firms under his investigation, giving them all the ridicule and bad publicity he could, accusing them of charging high prices for certain of their pharmaceuticals which cost very little to manufacture. His committee ignored the many millions of dollars invested in research to develop these particular products which must be repaid through their sale. He criticized their advertising. This program has been reflected upon our own JOURNAL. Beginning about a year ago, we lost more than 40 per cent of our advertising revenue. Of necessity, the size of THE JOURNAL has been curtailed, and that affects our medical authors who give us papers for publication—very good papers which are abundantly worthy of publication, many of which we have not been able to use.

This situation came upon us suddenly. We had been accepting papers with the full intention of publishing them soon—as in past years—but all at once we discovered we had manuscripts that were a year or more old, waiting to be used. The Editor and the Publication Committee are embarrassed, because these papers should be printed. We are hopeful something will happen to allow our advertising to recuperate and allow us to use the material now in our files. Some new papers are being accepted also which must be used. For some months past, papers accepted for specialty numbers have been used as promised, but the others that come through various sources, such as direct presentation, have been delayed, and many papers have been returned to the authors with the explanation that we do not have room.

Michigan Medical Service

We wish to congratulate the Michigan medical profession, as we have done for so many years, on its great contribution to the social-economic field of medicine by establishing and creating Michigan Medical Service. This work began in the early days of the great depression which most of our practitioners do not even remember. Very few people had work, and there was practically no hope. Doctors cared for their patients and hoped that they might be paid some day. Getting a patient into the hospital was almost impossible and many times the doctor had to guarantee that payment.

In 1931, a committee of the Michigan State Medical Society (The Committee on Survey of Medical Service and Health Agencies) began a study. A report was made to the House of Delegates at the 1933 annual session, consisting of 174 pages and 20 pages of appendix. Starting with this material, several groups in Wayne, Calhoun and Washtenaw Counties developed and evolved, through final action of The Council, the Michigan Medical Service.

This was a complete, absolutely new concept of paying for medical services, the result of ten years of intensive study by dedicated medical men who were not afraid to work and whose sole idea was to establish some method by which medical men could deliver and our patients could receive essential medical care. The plan was an immediate success. It grew during the years, expanding so far beyond the fondest dreams of its originators that Senator Vandenberg dubbed it a "public trust."

After its first rate adjustment, Michigan Medical Service had only one rate increase by 1955 and had built up a reserve of $8 million—almost exactly the amount needed to pay for three months' services. Then came the Governor's Commission, Labor's antagonism, the hearings before the Insurance Commissioner, the months of adverse newspaper publicity and repeated inadequate rate allowances.

Here was a corporation with three and three-quarter million subscribers paying a tremendous portion of medical and surgical services in the state, founded by inspired dreamers who knew not how well they built. Here was a public service corporation paying out almost three million dollars a month for the medical and surgical services to our subscribers. Has anybody any idea what the potential value of this organization was?

Liberalization

In about 1955 and 1956, a change in attitude developed. Our subscribers wanted more services and our doctors wanted to render more services. Some wanted a deductible plan, and some suggested that many surgical conditions could be cared for in the out-patient department of the hospital or in the doctor's office and thus save hospital beds. This was done. At that time, many of the Blue Shield organizers who had served during the development stage were still on the Board. A feeling grew that the term of membership on this Board should be interrupted, thus extending the numbers and bringing in new workers. Our subscribers began to drop gradually over the next five years.

Our financial situation also worsened. Our $8 million of reserve was dissipated, including another $2 million overdraft. In the early years, Blue Shield required its plans to build up reserve to the point of three months' payments. The Insurance Commissioner refused to allow rate adjustments which would continue this reserve. He saw to it that the reserve was

used up. The present Commissioner, about two years ago, refused to allow sufficient adjustments to rebuild the reserve—saying he did not believe in it. At the last adjustment, the Commissioner cut off the percentage needed to re-establish the reserve, but demanded that the reserve be re-established.

Poor Public Relations

The medical profession is again under attack by Labor and by the Federal Administration. In Michigan Medical Service, we have an entity of untold value, providing services for our subscribers to the amount of approximately $7 million a month. This is a remarkable and very precious public service which makes it possible for the doctors to care for their patients and for the patients to get almost unlimited services. But what is the future? Professor McNerney, in his report just rendered, made one very specific recommendation—that in Blue Cross and Blue Shield the doctors in active practice, the active hospital administrators, not be put on the governing boards. He suggests public citizens. He undoubtedly thought that corporations of the value of these two should have specially trained executives as directors and trustees.

The medical profession in Michigan developed this program which insurance experts claimed was impossible. Michigan State Medical Society members and their advisors were capable of doing the job. They are capable of continuing. We have every confidence we can find among our nearly 7,000 members enough with public spirit, dedication and knowledge who can operate these two corporations. We fear, if they are taken away from us and given to the public in general, the ethical medicine procedures and philosophy will be eliminated and we shall have just another insurance company. Another look should be taken and another leap into a constructive future.

For the past five years, the number of subscribers has been going down, the reserves have been going down, the public concept of our services has been going down and the threat to take over through the King-Anderson program has been increased.

A Job To Do

Blue Cross and Blue Shield defeated the Wagner-Murray-Dingell Bills. If they are wholeheartedly accepted by our membership and made to work, Blue Cross and Blue Shield will defeat this present threat to the private practice of medicine. This can only happen if every member of our Society makes it work. The program is liberal. Subscribers within the income limits are entitled to their services and a great many of our doctors are religiously rendering these services in strict conformity with the rules. To those subscribers over income limit, the doctor has a perfect right to make his customary charges. He should make this explanation to the patient before rendering his bill. There are extraordinary services some of our men are rendering, so intricate and new and in such amazing fields, that no insurance program ever could properly compensate for the time and the work. The whole profession should cooperate and should help make this burden easier.

Our critics are labor leaders, bureaucrats, who have absolutely no sympathy with the medical profession as is indicated by their continuous tirades against everything "medical." We can only hope this period will pass quickly and that the profession will be able to maintain its dignity and will retain its place of honor.

The liberalization program mentioned above was supposed to render more efficient care to our subscribers and also to make hospital beds available for other purposes because being a bed patient was a prerequisite to the surgical program. Constantly increasing adverse criticism due to the requested rate increases necessitated by increased costs and volumes of services has had an influence upon the growth of Blue Shield in Michigan. In 1957, there were 3,751,000 subscribers. This has gradually declined until in April, 1961, there were only 3,318,000 subscribers, with the prospect and the knowledge of many other cancellations. During this same period, the national Blue Shield program had increased from 39,619,000 to 45,328,000. These are published figures. Actually, only one other state has followed Michigan's trend. Every effort and every study is being done to reverse this trend, but all of the publicity has not helped the situation.

The McNerney report, as mentioned last month, stressed that the costs of hospital and medical care are on a definite increase. That philosophy must be accepted. It mentioned that the doctors must reverse the public opinion in some way. One item we would like to suggest is that, in all our contacts, an effort be made to separate "medical care" from the total mass of health care. Every time a report is made about the increases here and there and the new King-Anderson Bill and what it will do, social security and all the rest mention "medical care."

President Kennedy gave us a hint of his policy for the social security program. The King-Anderson Bill (HR 4222) does separate medicine from the general health program. Specifically and implicitly it excepts from the benefit all medical care except anesthesiology, pathology, physiatry, and radiology in the hospital, giving the impression that those branches of medical care will be accepted. The Bill provides that those services will be used when they are "functions of the hospital." There is no provision in the Bill to pay these medical groups direct.

The philosophy entailed in caring for the aged

(Continued on Page 1332)

NEW **SPECIAL COUGH FORMULA**
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Each teaspoon (5 cc.) contains:

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Bright red, pleasant tasting, raspberry flavored syrup

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AMA Clinical Meeting Offers Many Subjects

A group of Western physicians will present a study of medical aspects of American habits as a highlight of the program of the 15th annual clinical meeting of the American Medical Association, Nov. 26-30 at Denver.

William Covade, M.D., of Denver, is chairman of the section. The program will include such topics as "The Coffee Break," by E. Chester Ridgway, M.D., Cody, Wyo.; "Psycho-Stabilizers," by Jack O. Stoffel, M.D.; "Psycho-Sexual Aspects," by Bradford Murphey, M.D.; "The Pet in the House," by Francis T. Candlin, D.V.M.; "Automobile Driving," by Horace E. Campbell, M.D., and "The Cocktail Hour," by Clyde E. Stanfield, M.D. This team of doctors has been studying the various American habits to be covered in the section for some time, and the program is expected to draw wide interest among the profession.

Chemotherapy in cancer, an area in which knowledge is growing rapidly, will be another important feature of the clinical meeting program.

Much new knowledge has been gained in the last decade in the important area of antibodies and antigens. Several papers have been scheduled to report some of the new findings to the clinicians.

Many, many other subjects will be covered at this AMA clinical meeting.

* * *

AMA Makes Staff Changes

Leo E. Brown is now the assistant to the executive vice president of AMA, and James Reed, director of press relations and editor of *The AMA News*, takes over as director of the communications division.

The changes were prompted by the need for additional manpower to assist in coordinating and implementing the expanding programs of the Association.

Mr. Brown joined the AMA staff in December, 1950, as the first executive secretary of the Student American Medical Association. He became AMA public relations director in March 1951 and director of communications when that division was created in 1959.

Mr. Reed came to AMA in June, 1958, to start *The AMA News* after serving more than eight years as editor of the *Topeka* (Kan.) *Daily Capital*. He became AMA director of press relations the first of January this year, continuing his duties as editor of *The AMA News*.

Let's Learn from Others

Leonard W. Larson, M.D., Bismarck, N. D., president of the AMA, concluded his recent testimony re HR 4222 before the House Ways and Means Committee of the Congress in these words:

"The American people have been called upon to sacrifice to build up the strength of the nation so that we can meet the rising peril of communism. But we don't believe that America can be strengthened by sacrificing the best system of medical care in the world. We don't believe America can be strengthened by copying medical systems under which one foreign country after another has lost leadership in the science and arts of medicine. We don't believe the strength of this nation lies in the direction of substituting medical failure for medical success."

Michigan Medical Service

A Job to Do

(Continued from Page 1328)

through social security, in our opinion, is wrong. It is an entering wedge for socialized medicine. The sponsors have been very careful to eliminate medicine in writing this Bill, but once passed, a very simple amendment can eliminate this exception and we are all in it. In contacts with our newspapers and with our publicity channels, it would seem wise to impress upon the public that when referring to the increased health care, and the expanding cost, stress be placed upon the fact that the purely medical care included has not increased measurably and only covers 27 cents out of the so-called "medical dollar"—the health dollar. The health dollar now covers mostly hospitals and nursing by the very definitions of the King-Anderson Bill.

Special Number

We wish to express our appreciation to Doctors Cortopassi, Crossen, and Price for their assistance in assembling the material for the Otolaryngology, the Ophthalmology, and the Aging numbers. They have secured very well-prepared and well-thought-out papers, and we again thank them.

Seat Belts

Recognizing the safety value of seat belts, The University of Michigan has started installing seat belts on all new automobiles when purchased.

Use MSMS Members In MAP TV Series

"Decision: The Moment of Truth," televised series providing information about health organizations and depicting the activities of the member professions of MAP, has proven to be a popular Sunday morning program in Michigan.

Designed to point up the decisions that the professional man must make in the practice of his profession, "Decision" features outstanding individuals in the professions, lay-persons with special knowledge in related fields and leaders associated with the Michigan Health Council, co-sponsor of the program.

To date several MSMS members have appeared on the program. Physicians and subjects include:

H. H. Stryker, M.D., Kalamazoo—"Orthopedics"
Otto K. Engelke, M.D., Ann Arbor, President, MSMS, and Harry B. Zemmer, M.D., Lapeer—"What MHC Is"
Robert H. Trimby, M.D., Lansing—"Baby Emergencies"
Joseph Schaeffer, M.D., Detroit—"Rehabilitation"
Sidney E. Chapin, M.D., Dearborn, President, MHC—"MHC State Conference"
Kenneth H. Johnson, M.D., Lansing, Past-President, MSMS—"The MSMS President's Program"
Richard E. Straith, M.D., Detroit—"Plastic Surgery"
George Lowrey, M.D., Ann Arbor; Johan Eliot, M.D., Ann Arbor—"Baby Safety Tips"
T. S. Conover, M.D., Flint; Richard C. Bates, M.D., Lansing—"Alcoholism"
William Hubbard, M.D., dean, U. of M. Medical School—"Health Career Exhibit"

Informal and informative, "Decision" gives the viewer the illusion that he is being accorded the privilege of a look behind a door marked "private" to learn first-hand what the professional man is doing, how he does it and why he does it.

Visual aids seldom seen by the lay-person are used and the general effect is like listening in on a private conversation between experts who are discussing "trade secrets."

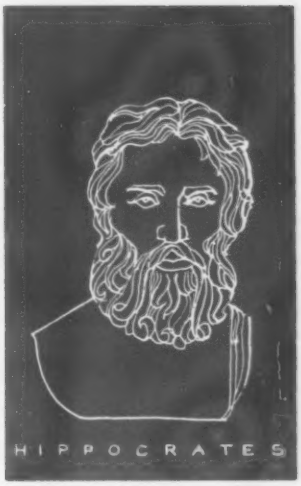
Scripts are written by John B. Kantner, MHC director of Professional Replacement. Hugh W. Brenneman, MSMS Public Relations Director and Executive Director of MAP, narrates the 15-minute programs.

It is shown each Sunday morning from 9:00 to 9:15 a.m. over WJBK-TV, Channel 2, Detroit. A complete list of more than 30 programs can be secured by writing MAP Executive offices, 120 W. Saginaw, E. Lansing.

* * *

Schedule MAP Congress At Michigan State

The time and place chosen by the Board of Directors of MAP for the third annual CONGRESS OF THE PROFESSIONS, February 9 and 10, 1962, East Lansing, was selected by the members who replied to a survey mailed them earlier this year.



Lansing was the number one choice of location of those replying, with the majority specifying that a Congress devoted to professionalism should convene at an academic center such as Kellogg Center, MSU. Winter was the preferred season and most members asked for a one and one-half day conference with programs directed to mutual aims and problems. The 1961 theme, "Great Thoughts, Great Accomplishments and Great Challenges," was a popular choice for program material.

The Congress Planning Committee is already hard at work trying to incorporate as many of the recommendations of the members as possible to fit into the day and a half program. Tentative plans include a meeting to further consider the organizational structure of the American Association of the Professions, incorporated last summer. Leaders of national professional associations and others interested in forming state associations of the professions in other states are being invited.

Show Beaumont Plaque At Annual Session Exhibit

The new bas-relief plaque of William Beaumont, M.D., was exhibited at the 1961 MSMS Annual Session. The plaque is being stored now at MSMS and will be featured next summer at the Beaumont Memorial at Mackinac Island.

The plaque, done by Artist Marshall Fredericks, credits the Mackinac Island doctor as "Pioneer in Gastric Physiology."

The original plaque is at the Beaumont Hospital in Royal Oak.

The copy for Mackinac Island was possible through the generosity of Herman Scarney, M.D., Detroit, and three Bloomfield Hills men—Howard Barker, M.D., Mr. Lawrence S. King, and Mr. Irving Babcock.

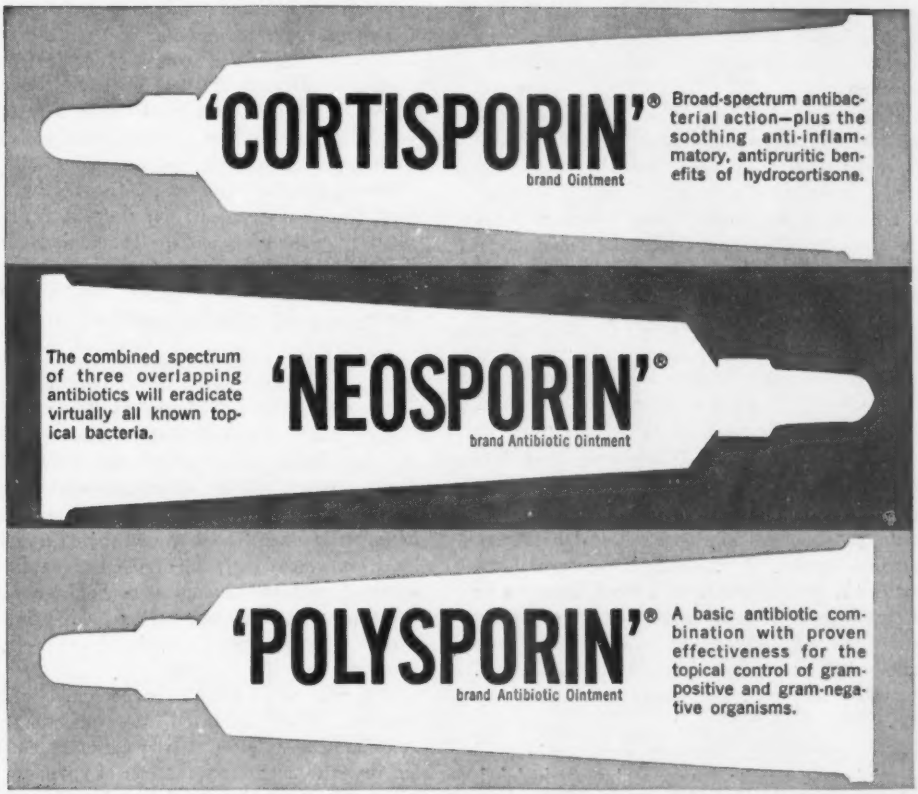
Find Tuberculosis Decline

A steady 10-year decline in the number of new cases of active tuberculosis discovered among Veterans Administration patients admitted for treatment of other diseases has been reported by the Veterans Administration.

The rate in the Veterans Administration tuberculosis case-finding program, which excludes hospital patients admitted for tuberculosis, has declined from 58 per 10,000 in 1950 to 10 per 10,000 in 1960.

"I recommend that a jobs-for-the-aged campaign and program be initiated on a nation-wide basis—in every city, town and community across the land."—DAVID B. ALLMAN, M.D., Atlantic City, N. J., Past-President of The American Medical Association.

'B. W. & Co.' 'Sporin' Ointments rarely sensitize . . . give decisive bactericidal action for most every topical indication



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MICHIGAN DEPARTMENT OF HEALTH

ALBERT E. HEUSTIS M.D., State Health Commissioner

To Discontinue X-Raying Under Thirty Years of Age

Policy regarding the age of persons to be x-rayed by mobile screening x-ray units has been changed so that no one under the age of thirty will be x-rayed in mass screening programs. Previously, the minimum age was twenty-one.

The minimum age has been raised to thirty because the yield of tuberculosis cases found by mobile x-ray in those under thirty is so slight. Actually, better than 92 per cent of persons discovered to have active tuberculosis by use of the mobile x-ray are over thirty years of age. Equally significant is the fact that 98 per cent of the heart abnormalities and 91 per cent of the suspected lung tumors discovered by mobile x-ray units occur in persons over thirty.

Plans are being developed so that persons under thirty will be tuberculin tested at the same time those thirty or more years old are being x-rayed. Those with positive tuberculin tests will be notified to report for a chest x-ray and other tests necessary to confirm or rule out tuberculosis.

Latest figures indicate that approximately 20 per cent of the people of Michigan are tuberculin reactors. In tuberculin surveys of school children, carried out on a statewide basis, 2.5 per cent were found to be reactors to the test. It is from this presently infected group that most of our future cases of active disease will come so it is extremely important that the infected individuals be identified and kept under close observation.

The thirty-year-old limit is effective at once in areas where mobile x-ray units have not been scheduled. Where they have already been scheduled and announced, with publicity materials printed, persons twenty-one and over will still be x-rayed.

Venereal Disease Drug Distribution

The Michigan Department of Health has been supplying aureomycin, 250 mg. capsules, for the treatment of penicillin-sensitive cases of *syphilis*. In the future, erythromycin will be substituted for aureomycin, primarily because it has been shown that there are fewer side effects from erythromycin. The dosage and treatment plan is the same as with aureomycin, outlined on the treatment schedule recommended by the Venereal Disease Control Committee of the Michigan State Medical Society.

Erythromycin is not supplied for the treatment of other venereal diseases. It is required that the request for this drug be accompanied by a case report (V-76) with a brief statement from the physician stating that the patient is penicillin-sensitive, the amount of previous therapy, and the reason he believes the patient is hypersensitive to penicillin.

Requests should be made to your local health department. Because of the high cost of this drug, it cannot be stockpiled at local health departments but will be replaced upon request on an individual case basis under the criteria outlined above.

If you practice in an area not served by a full-time local health department, the drug is available upon request to the Division of Tuberculosis and Adult Health, Michigan Department of Health.

Tetanus in Michigan

One of the most severe attacks of tetanus ever treated at The University of Michigan Medical Center was a thirteen-year-old boy from Monroe, Michigan.

Jack Burns was admitted to University Hospital last June with classic symptoms of "lockjaw," the dread tetanus. Once quite common, the infection is now rarely seen because of the widespread use of immunization. The boy had driven a splinter into his foot seven days earlier. He had never been immunized, and the disease took hold. For the next five weeks his body was twisted with painful muscle spasms. Death from asphyxia or utter physical exhaustion was always near.

Surgeons performed a tracheotomy to help him breathe. They removed the offending splinter. Anesthesiologists gave massive doses of muscle-relaxant drugs to counteract the violent spasms. A pediatrician, like a field general, watched the hourly progress of the disease and enlisted the help of other specialists to meet each emergency. Private duty nurses were in constant attendance.

An extensive amount of hospital equipment was brought into play: heat exchanger, pressure mattress, two respirators and other items. At one point the circuits became so overloaded University electricians had to string emergency power lines to the boy's bedside to operate all the apparatus.

Only rare cases of tetanus have lasted more than four weeks. Jack's last spasm—a comparatively minor one—occurred on August 2, five weeks after the onset of the disease.

The Michigan Department of Health reports thirty-two cases of tetanus over the past five years, seventeen of them fatal.

Introducing PHILIPS ROXANE

A new name in Pharmaceuticals

Philips Roxane comes to you as a new name in American pharmaceutical manufacture. But our roots go deep. We have well-established resources in this country. In Holland and elsewhere in Europe, we have access to research from which substantial contributions have been made in the areas of human, animal and plant health.

A wide range of new pharmaceuticals is now being developed which will have significant usefulness to you in your practice.

For example, extensive studies are now being carried out in organic synthesis, vaccines, and radioactive isotopes. Some of these pharmaceuticals and biologicals are presently undergoing clinical trials in this country.

One research project nearing completion is a measles vaccine, now undergoing extensive U. S. clinical trial. Another preparation, soon to be available, is a progestational agent which gives promise of offering distinct advantages over those presently available. A true progestin, it will have wide application in female disturbances without androgenic, estrogenic, or corticosteroid side effects.

Philips Roxane has acquired affiliates throughout the United States, where research and development in human, animal and plant medicines are being greatly extended through their production facilities and sales organizations.

The name Philips Roxane will become as familiar to you as the names of many other fine pharmaceutical houses in this country, whose products and people serve you faithfully.

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PROGRESS IN RESEARCH FOR MEDICINE

Pathology Comment

These items are provided by the Michigan Pathological Society

Macroglobulinemia

Macroglobulins are most frequently described in the clinical syndrome known as "macroglobulinemia" and delineated by Waldenström in 1948. Characteristic features of this condition, which primarily affects elderly men, are:

Large amounts of serum protein which sediment rapidly in the ultra-centrifuge.
Weakness and dyspnea of insidious onset.
Hemorrhagic episodes, especially epistaxis.
Visual disturbances associated with hemorrhagic retinitis.
Normochromic anemia.
Lymphadenopathy.
Splenomegaly and hepatomegaly.
High sedimentation rate.
Relative lymphocytosis and lymphocytic infiltration of bone marrow.

Other diseases may have macroglobulins

The molecular weight of this unusual protein varies from 400,000 to 1 million or more. A presumptive test for macroglobulins is the distilled water test, or "Sia water test." Unfortunately false negative results sometimes occur. Definitive diagnosis is made by ultracentrifugation of the serum. For hospitals not having an ultracentrifuge, examination of serum by starch-gel electrophoresis with and without 2-mercaptoethanol has been proposed as a simple procedure for detecting macroglobulinemia.[1]

The urine in classical cases of macroglobulinemia is normal; the bone marrow commonly shows plasma cell hyperplasia and an increase in lymphocytes and mast cells. Hemorrhagic phenomena may occur without demonstrable alteration in platelets or clotting factors. Electrophoretically the peak is usually in the gamma globulins, less often in beta globulins. In addition to the condition described by Waldenström, macroglobulins are also found occasionally in congenital syphilis, hepatic cirrhosis, nephrosis, multiple myeloma and cancer. In these diseases, however, immunologic studies have shown that the high molecular weight proteins found differ antigenically from those found in Waldenström's disease.

Coagulation defects which have been reported with macroglobulinemia include delayed clotting, slightly prolonged prothrombin time, deficiency of fibrinogen conversion accelerator factor and intereference with the conversion of fibrinogen to fibrin. There rarely may be poor prothrombin consumption and prolonged bleeding and clotting time.

Reference

1. Butler, E. A., Flynn, F. V., Harris, H. and Robson, E. B.: The laboratory diagnosis of macroglobulinemia. Lancet, 7197:289 (Aug. 5) 1961.

New General Anesthetic

A highly successful new general anesthetic has been administered to more than 300 patients at The University of Michigan Medical Center. Used for a variety of short-lasting operations at University Hospital, the drug is reported to leave patients free of dizziness, nausea and other after effects. It is especially valuable for children, but has been used successfully on patients of all ages.

Called "G-29," the drug is a milky odorless oil which will completely anesthetize a patient in 15 seconds. It is given in a single intravenous injection, usually in the arm. University of Michigan doctors say the length of time the patient is anesthetized can be controlled with great precision by varying the amount of G-29 injected. Two teaspoonsful will anesthetize a patient for about eight minutes. Recovery is prompt. The patient suffers no hangover, depression or nausea often experienced with other general anesthetics.

The University of Michigan is one of two major medical centers in the United States known to be employing G-29. The other is Duke University. The University work is being co-ordinated by Dr. Gunter Corssen, assistant professor of anesthesiology, who last fall visited the Swiss laboratories where the drug was prepared. M. J. Thuillier, a French chemist, developed G-29 and first tested it on laboratory animals.

Dr. Corssen presented a scientific exhibit on the drug at the American Medical Association annual meeting in New York City, in June.

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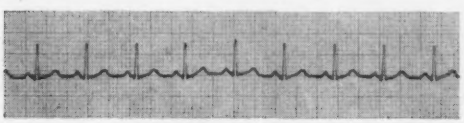

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Detroit Woman Full Colonel

One of the first "lady doctors" to be admitted to the Army during World War II became the first woman ever to wear the eagles of a full Colonel in the Army Medical Corps, in a recent ceremony at Brooke Army Medical Center.

Colonel Clara Raven, pathologist, is Chief of the Laboratory Service of the 323rd General Hospital, a U.S. Army Reserve unit from Detroit.

The unit was at the Medical Field Service School for its annual two weeks of active duty for training this fall, when the promotion was made. Colonel Raven was one of the first six of about 75 women physicians admitted to the Army in July 1943, and served for four years. She has continued her reserve affiliation since then.

She holds BA and MS degrees in bacteriology from the University of Michigan, with considerable foreign language. This led to a job with the American Medical Association to translate and abstract Russian, German, Spanish, French, and Italian medical literature. Subsequently she obtained her medical degree from Northwestern University School of Medicine.

Since her return to civilian life in 1958, Colonel Raven became deputy medical examiner, first for Los Angeles, Calif., and in November 1959 for Wayne County. She knows of no other woman in a similar capacity.

MEDICAL SERVICE CORPS OFFICERS—Public Law 87-142 amends Section 3579, title 10, United States Code; provides permissive authority for officers of the Medical Service Corps command of other troops than the Medical Service Corps. Since the establishment of the Corps in 1947, Medical Service Corps officers have been assigned in increasing numbers to branch immaterial duties. These assignments cover such fields as research and development, supply, intelligence, Military Assistance Advisory Groups, military missions, and Army aviation, as well as the Army General Staff. In addition, since the establishment of the Logistics Officer Program by the Department of the Army, certain officers of the Medical Service Corps have been approved for participation as logistics officers, and it is anticipated that many others will continue to be nominated for this important career field.

BUILDINGS UNDER WAY—Work is progressing on three construction projects totalling $4,050,000 at the University of Michigan Medical Center. Involved is the expansion of the physical medicine department and modernization of central services in University Hospital, a joint project costing $1,800,000; erection of the $1,750,000 Kresge Hearing Research Institute attached to the southeast end of the present Kresge Building; and creation of a $500,000 Clinical Research Unit on the ground floor of the hospital. The greatest amount of work involves interior structures at University Hospital to create modern facilities for patient care, teaching and research. The work began in August.

* * *

TBA HONORS PHYSICIAN—The service of John W. Towey, M.D., in his efforts for tuberculosis control were commemorated recently at a public ceremony at Powers-Spalding High School by Theodore Werle, executive secretary emeritus of the Michigan Tuberculosis Association. A portrait of Doctor Towey, himself a victim of tuberculosis while a young practicing doctor in 1919, was presented to the Pinecrest Medicare Facility at Powers-Spalding Lions Club which sponsored the painting.

* * *

MICHIGAN COURSES—The American Diabetes Association will conduct its tenth postgraduate course "Diabetes in Review: Clinical Conference," in January in Detroit and Ann Arbor. The sessions, January 17, 18, and 19, will be at the Statler-Hilton in Detroit. The lectures on January 18 are scheduled at the University of Michigan. The course is being offered in cooperation with the University of Michigan Medical School, Wayne State University College of Medicine, Wayne Medical Society, and the Michigan Diabetes Association. Frank S. Perkin, M.D., Detroit, is chairman of the local arrangements committee. For further information, write to American Diabetes Association, 1 East 45th Street, New York 17, New York.

* * *

ANNOUNCE EXAMS—The American Board of Obstetrics and Gynecology will hold the next scheduled examination (Part I), written, in various cities January 5, 1962. Current Bulletins may be obtained by writing to: Robert L. Faulkner, M.D., Executive Secretary and Treasurer, 2105 Adelbert Road, Cleveland 6, Ohio.

* * *

TB X-RAYS—By this Fall, the Michigan Department of Health expects to be x-raying only persons 30 years old and over with their mobile x-ray units. The minimum age is being raised from 21 because it has been found that 90 per cent of the persons discovered to have active tuberculosis are over 30. Plans are being developed to allow persons under 30 to be skin tested at the same time that older people are being x-rayed by the mobile units. Those with positive reactions will be notified to have an x-ray and other tests.

* * *

U-M EYE BANK—The University of Michigan "eye bank" has set a goal of 20,000 pledges to help insure a continuing supply of eyes for persons with corneal blindness. Since "The Michigan Eye Collection Center" was established

in 1957 at the University, the eye bank has received donations of 166 eyes. Of these, 103 were used for corneal transplants performed at University Hospital. The remainder were used for operations in Detroit, Flint and Owosso, and for research in perfecting the techniques of transplantation.

* * *

NUTRITION PROJECT—The University of Michigan School of Public Health has received a five-year training grant to expand the teaching program in public health nutrition by creating a specialty area under the direction of a physician. The University is seeking a distinguished teacher with a substantial academic background in this field.

* * *

M.D. LOCATIONS—Placed by Michigan Health Council in July and August: George J. Hoekstra, M.D., Parchment; Lloyd S. Anderson, M.D., Hancock; Earle Stine, Jr., M.D., Pigeon; Robert C. Hulse, M.D., Munising; Jack R. Inyart, M.D., Mancelona; Adolfo M. Chipoco, M.D., Detroit; W. Gene Schroeder, M.D., Ishpeming; John L. London, M.D., Muskegon Heights.

Assisted by Michigan Health Council in July and August: Joseph E. Kincaid, M.D., Kalamazoo; Leon D. Thomas, M.D., Detroit; Hans A. Beyer, M.D., Royal Oak; Marlin P. Krenz, M.D., Muskegon; Robert C. Mahaney, M.D., Holland; John R. Spengler, M.D., Petoskey; David R. McCubbrey, M.D., Plymouth; James N. Kaufman, M.D., Allegan; Gerry L. Mayer, M.D., Ludington; Thomas J. Miller, Jr., M.D., Mason; John M. Miller, M.D., Port Huron; L. R. Mannausa, M.D., Port Huron; James E. Waun, M.D., Big Rapids; David L. Jones, M.D., Bad Axe; Veldora C. Yesko, M.D., Detroit; Carlos F. Gonzales, M.D., St. Clair; Robert A. Anderson, M.D., Cadillac; Eldon D. Keeney, M.D., Holly.

* * *

HURRICANE CARLA—Austin Smith, M.D., President American Pharmaceutical Association, after a canvas, reports:

"Nearly 40 firms who responded to our request for information and who account for most of the prescription drug production in the United States have undertaken to replace without charge damaged and destroyed pharmacy stocks in the hurricane area. Most of these firms have stated that such replacements apply to those stocks which are uninsured. The method of carrying out these activities varies somewhat according to the resources and personnel of each firm. Those who maintain or are able to furnish field representatives in the storm area instruct these men to make personal observations and to arrange for stock replacements. Others accept claims at their home offices and administer them accordingly."

* * *

SYMPOSIUM ON TRAUMA—The Ninth Annual Symposium on Trauma by the Detroit Chapter of the Michigan Committee on Trauma, American College of Surgeons, will be held on Wednesday, December 6, 1961, at the Wayne County Medical Society Headquarters in Detroit,

Michigan. This is a day-long session. Wayne W. Glas, M.D., is Chairman of the Program Committee. For further information and reservations, please contact Wayne W. Glas, M.D., Department of Surgery, Wayne County General Hospital, Eloise, Michigan.

* * *

MEDICAL MEETINGS, USA

Fifteenth Annual Postgraduate Assembly, San Diego County General Hospital, Wednesday, November 1, and Thursday, November 2, 1961, County Hospital, San Diego, California. James E. Sandell, M.D. c/o San Diego County General Hospital, San Diego 3, California.

Fifth Annual Symposium on Diabetes, November 10, Passavant Memorial Hospital, Chicago. Chicago Diabetes Association, 620 North Michigan Avenue, Chicago, Ill.

Gerontological Society, November 10-12, Pittsburgh, Pennsylvania. Robert W. Kleemeier, M.D., Washington University, St. Louis 30, Secretary.

American Association of Public Health Physicians, November 13-17, Detroit. J. M. Bistowish, M.D., P.O. Box 1568, Tallahassee, Fla., Secretary-Treasurer.

American Public Health Association, November 13-17, Cobo Hall, Detroit. Berwyn F. Mattison, M.D., 1790 Broadway, New York 19, Executive Director.

American Psychiatric Association, November 16-18, Hotel Schroeder, Milwaukee. Miss Joan D. McGucken, 756 N. Milwaukee St., Milwaukee 2, Administrative Assistant.

Radiological Society of North America, November 26-December 1, Palmer House, Chicago. Mr. Maurice D. Frazer, 3145 O Street, Lincoln, Neb., Secretary.

American Medical Association, Clinical Meeting, November 27-30, Denver. F. J. L. Blasingame, M.D., 535 N. Dearborn St., Chicago 10, Executive Vice-President.

American Academy of Dermatology and Syphilology, December 2-7, Palmer House, Chicago. Robert R. Kierland, M.D., Mayo Clinic, Rochester, Minn., Secretary-Treasurer.

American Academy of Orthopaedic Surgeons, January 27-February 1, 1962, Palmer House, Chicago. Mr. John K. Hart, 29 E. Madison St., Room 910, Chicago 2, Executive Secretary.

"Conceptual Advance in Immunology and Oncology—Fundamental Cancer Research." March 1, 2, 3, 1962, Texas Medical Center, Houston.

Department of Otolaryngology, University of Illinois College of Medicine, "Postgraduate course in Laryngology and Bronchoesophagology," April 2 through 14, 1962.

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IN MEMORIAM

HENRY P. GREENE, M.D., forty-three, Muskegon physician, died August 18, 1961. A native of Miami, Florida, Doctor Green received his M.D. degree from Meharry Medical College at Nashville, Tennessee.

Doctor Greene interned at Homer Phillip Hospital, St. Louis, Missouri, and began his medical practice in Muskegon in 1946.

KENNETH M. McCOLL, M.D., sixty-five, Detroit physician, died August 13, 1961.

A native of Detroit, Doctor McColl was an alumnus of Detroit University School, University of Michigan School of Literature and the University of Michigan Medical School. He was a former head of the medical staffs of Cottage and Eastside General Hospitals and a member of Harper Hospital. He was active in the organization of local hospital postgraduate educational programs. He was a member of numerous medical societies and the Detroit Boat Club.

BURTON M. MITCHELL, M.D., seventy-one, Pontiac physician, died August 6, 1961.

Doctor Mitchell was a member and past president of the Oakland County Medical Society, and a retired member of the Michigan State Medical Society.

He had practiced in Pontiac for forty-two years and was a former Oakland County deputy coroner. A native of Ontario, Doctor Mitchell was graduated from the Detroit College of Medicine in 1916.

He was a life member of Pontiac Elks Lodge No. 810 and Roosevelt Lodge No. 510, F&AM in Pontiac.

WALDEMAR B. MITCHELL, M.D., sixty-five, Grand Rapids physician and surgeon, died by accidental electrocution, August 18, 1961.

Doctor Mitchell had retired three weeks before to Elk Rapids. Born in Elk Rapids, he attended Ypsilanti Normal College (now Eastern Michigan University) and Albion College. After graduation from Albion College, he taught and later was principal at Onaway High School. He was graduated from the University of Michigan School of Medicine in 1926, when he began his practice in Grand Rapids.

Doctor Mitchell was on the staff of Butterworth, Blodgett and St. Mary's Hospitals, and was a past president of the Kent County Medical Society.

JOSEPH C. PONTON, M.D., sixty-one, Mason physician since 1930, died July 11, 1961.

Doctor Ponton was graduated from the University of Michigan School of Medicine in 1930, and served his internship at St. Lawrence Hospital, Lansing.

Memberships included the Galens honorary medical association, Pi Kappa Alpha fraternity honorary. He was active in the American Legion and Masonic orders.

He received the Croix de Guerre for service in France during World War I.

LAWRENCE REYNOLDS, M.D., seventy-two, nationally-known Detroit radiologist, died August 17, 1961.

Doctor Reynolds was chief of staff, chairman of the executive committee and chief of the radiology department of Harper Hospital.

In association with several other physicians, Dr. Reynolds operated four laboratories in the Detroit area.

Doctor Reynolds, a professor of radiology at Wayne State University, was awarded an honorary degree by Wayne in 1956 for his research. His alma mater, the University of Alabama, also gave him an honorary doctorate.

Doctor Reynolds began practicing medicine in Detroit in 1922 after teaching radiology at Harvard University and Johns Hopkins University Medical School, from which he was graduated in 1916.

Among his nonmedical activities was a term as president of the Detroit Public Library Commission. Doctor Reynolds was an avid book collector, and his library contained a collection of rare medical books.

At the time of his death, Doctor Reynolds was Editor of the *Americal Journal of Roentgenology, Radium Therapy and Nuclear Medicine.*

He was a member of several professional medical societies and a past president of the Detroit Roentgen Ray and Radium Society. He also was an honorary member of roentgen ray societies in Germany, Italy and Colombia.

JOHN W. RIGTERINK, M.D., ninety-one, Grand Rapids physician for sixty years, died August 26, 1961.

Doctor Rigterink received a Bachelor of Science degree from the former Michigan Agricultural College in 1893 and graduated from the University of Michigan Medical School in 1901, coming to Grand Rapids in 1918.

Doctor Rigterink was a past president of the Kent County Medical Society and a life member of the Michigan State Medical Society. He was a member of the resident staffs of Blodgett, Butterworth and St. Mary's Hospitals.

GEORGE H. RUGGY, M.D., fifty, Grand Rapids physician, died August 19, 1961.

Doctor Ruggy was a former instructor in medicine at Ohio State University, who came to Grand Rapids with his wife, LeMoyne, also a physician, about ten years ago. Mrs. Ruggy died three years ago in a fire at their home.

RICHARD B. SEARS, M.D., sixty-four, Muskegon County health officer since 1938, died August 24, 1961.

A native of Grand Rapids, Doctor Sears attended the University of Michigan, from which he held degrees of Doctor of Medicine and Public Health.

A specialist in the control of communicable disease, Doctor Sears served early in his medical career as a epidemiologist for the State Health Department. He maintained a practice in Grand Rapids for twelve years.

HAROLD W. WOUGHTER, M.D., fifty-four, Flint orthopedic surgeon, died August 16, 1961.

Doctor Woughter had resided in Flint since 1929. He received his M.D. degree in 1932 from the University of Michigan and served as assistant chief surgeon for Chevrolet from 1934 to 1939. He was a fellow of the American College of Surgeons and a member of several medical organizations. He took office as president of the Flint Academy of Surgery last December.

Osler Philosophy

Though little, the master word looms large in meaning. It is the "open sesame" to every portal, the great equalizer, the philosopher's stone which transmutes all base metal of humanity into gold. The stupid it will make bright, the bright brilliant, and the brilliant steady.

To youth it brings hope, to the middle-aged confidence, to the aged repose. It is directly responsible for all advances in medicine during the past 25 years. Not only has it been the touchstone of progress, but it is the measure of success in everyday life. And the master word is **work.**—WILLIAM OSLER, M.D., 1848-1919.

Michigan Authors

R. D. Stewart, M.D., Ann Arbor, and **D. S. Erley, M.S., A. W. Schaffer, B.S.,** and **H. H. Gay, M.D.,** Midland, "Accidental Vapor Exposure to Anesthetic Concentrations of a Solvent Containing Tetrachloroethylene," *Industrial Medicine and Surgery,* August, 1961.

Conrad L. Giles, M.D., and **Jo D. Isaacson, M.D.,** Ann Arbor, "The Treatment of Acute Optic Neuritis," *Archives of Ophthalmology,* August, 1961.

Michael M. Paparella, M.D., Detroit, "A High-Frequency Microvibrator," *Archives of Otolaryngology,* August, 1961.

Louis J. Steiner, M.D., Detroit, "Problems of the Aging Worker as Viewed by the Disability Examiner," *Industrial Medicine and Surgery,* August, 1961.

A. Hazen Price, M.D., Detroit, "Problems of the Aging Worker as Viewed by the Private Physician," *Industrial Medicine and Surgery,* August, 1961.

Avedis Donabedian, M.D., M.P.H., Ann Arbor, and **Leonard S. Rosenfeld, M.D., M.P.H.,** Detroit, "Some Factors Influencing Prenatal Care," *The New England Journal of Medicine,* July 6, 1961.

E. S. Gurdjian, M.D., F.A.C.S., H. R. Lissner, M.S., Detroit, **F. G. Evans, Ph.D.,** Ann Arbor, **L. M. Patrick, M.S.,** and **W. G. Hardy, M.D.,** Detroit, "Intracranial Pressure and Acceleration Accompanying Head Impacts in Human Cadavers," *Surgery, Gynecology and Obstetrics,* August, 1961.

Richard C. Schneider, M.D., Edward Reifel, M.D., Herbert O. Crisler, S.B., and **Bennie G. Oosterbaan, S.B.,** Ann Arbor, "Serious and Fatal Football Injuries Involving the Head and Spinal Cord," *Journal of the American Medical Association,* August 12, 1961.

Benjamin Schwimmer, M.D., Norman D. Henderson, M.D., and **B. H. Olson, Ph.D.,** Lansing, "Treatment of Acute Gonorrhea in Males with Synnematin B," *Public Health Reports,* July, 1961.

J. H. Shaffer, M.D., Detroit, "Stinging Insects—A Threat to Life." *Journal of the American Medical Association,* August 19, 1961.

The Doctor's Library

Acknowledgments of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

THE SEA WITHIN. The Story of Our Body Fluid. By William D. Snively, Jr., M.D., Lecturer in Pediatrics, University of Louisville School of Medicine; Attending Physician, Evansville Child Health Conferences; Medical Department, Mead Johnson & Company. Philadelphia and Montreal: J. B. Lippincott Company, 1960.

"The Sea Within" is a splendid, serious effort on the part of Dr. Snively to present the basic concepts of the constant metabolic activity within the human body and in particular to the vehicle for these reactions—the body fluid. This is written primarily as a popular presentation for the layman in the hope that it might broaden his horizon, particularly in respect to basic physiology. It would also serve as an instructive, painless primer to those students more seriously interested in the fluid and electrolyte problem. It is concise, easily read and certainly highly recommended for those interested in the miracle of human life.

J.G.G.

HANDBOOK OF SURGERY. Edited by John L. Wilson, M.D., Chief of Surgery, Veteran's Administration Hospital, San Francisco, California; Associate Clinical Professor of Surgery, University of California School of Medicine, San Francisco, California. Joseph L. McDonald, M.D., Dean of the Faculty of Medical Sciences, American University of Beirut, Beirut, Lebanon. Formerly Professor of Surgery, Columbia University, New York. Los Altos, California: Lange Medical Publications, 1960. Price, $4.00.

This is a fresh contribution to the handbook series by the Lange Medical Publications containing the essentials of basic diagnosis and non operative management of the common surgical diseases. The book is of pocket size, systematically presented and accompanied by multiple lucid illustrations. All subspecialties are represented including pediatric, plastic, gynecological, urologic and orthopedic sections. Useful dosage schedules of the common drugs are included.

This will undoubtedly serve as a readable, readily available source of information to house officers associated with the various surgical services as well as a ready office reference for general practitioners and surgeons alike.

J.G.G.

STROKE. A Study of Recovery. By Douglas Ritchie. Garden City, New York: Doubleday & Company, Inc., 1961. Price, $3.50.

This is an interesting account, written for popular consumption, by a British layman, who was the victim of a stroke at about fifty years of age. During his long convalescence, he kept a diary of the many trials and subjective responses to this long ordeal. It was this diary that served as the basis of his interesting and personal account. Especially interesting are his reactions to the various situations as they developed.

The book gives the professional reader an interesting insight into the patient's concept and reactions to such a long, chronic, debilitating illness, and the fight along the long road to recovery.

With this idea in mind, it is interesting, easy, reading in slightly under 200 pages.

An interesting final chapter, entitled "An Aphasic's Addenda" contains many practical suggestions for sufferers of stroke from the victim's point of view, which are not found anywhere else. The book would make interesting reading for any recuperating stroke victim.

R.W.B.

HOSPITALS, DOCTORS, AND DOLLARS. Reports and Opinions on Our Good Samaritans, Who Are Having Some Bad Times. By Robert M. Cunningham, Jr. Editor, The Modern Hospital. New York: F. W. Dodge Corporation, 1961. Price, $6.95.

This book is an interestingly written collection and assemblage of previously published articles and comments, and is timely. It is published by the editor of a modern hospital, who has a personal interest in hospitals. This gives all sides of the question of hospitals in America and England, the development of socialized medicine there, conditions of the hospitals and conditions of the doctors. Same comments here.

The author discusses from every angle the costs of hospital and medical care, showing the many instances where actually that cost appears great, it is not in actual values, any greater than it used to be. In money, yes, but in contributions and facilities and abilities, the costs haven't gone too far.

With conditions as they are prevailing now and the attempt to take over control or supervise control, we have been happy to study this book. We think our readers would enjoy it and, in reading it, would take comfort in their troubles and courage in their frustrations.

MANAGEMENT OF OBSTETRIC DIFFICULTIES. Revised by J. Robert Willson, M.D., M.S., Professor of Obstetrics and Gynecology, Temple University School of Medicine; Head of the Department of Obstetrics and Gynecology, Temple University Medical Center. 323 text illustrations; 1 color plate. Sixth edition. St. Louis: The C. V. Mosby Company, 1961. Price, $16.50.

This revised text includes the newer diagnostic procedures and treatments which can be used in the physician's office or hospital. As in previous editions of this book, its value is as a reference and not as a basic text. The book is divided into eight sections, namely—Infertility, Diagnosis of Pregnancy, Duration of Pregnancy, Complications of Labor, Obstetric Operations, Complications of the Puerperium, Special Therapy, and The Newborn Infant.

The chapter on chorio-epithelioma and chorio-carcinoma and hydatidiform mole are very inclusive, as is the chapter on obstetric analgesia and anesthesia.

Photographs and diagrams are especially well done and are self explanatory.

The final chapter on the newborn infant was written by Dr. Victor C. Vaughn and Dr. Wm. E. Laupus. The treatment of respiratory disturbances is of special interest.

There are excellent references listed at the end of each chapter.

J.R.P.

ADRENERGIC MECHANISMS. Ciba Foundation Symposium Jointly with Committee for Symposia on Drug Action. Editor for the British Pharmacological Society—J. R. Vane, B.Sc., D.Phil. Editors for the Ciba Foundation—G. E. W. Wolstenholme, O.B.E., M.A., M.B., M.R.C.P., and Maeve O'Connor, B.A. 163 illustrations. Boston: Little, Brown & Company, 1961. Price, $12.50.

This book is the report of a conference of research workers on the subject of the role of adrenergic mechanisms in the regulation of body function. As in previous Ciba Symposia, a series of papers is presented, following by a transcript of general discussion, in most instances. References are well documented. Illustrations are in black and white, and are quite adequate. The work is primarily of interest to those engaged in active research in the field.

R.W.B.

METABOLIC EFFECTS OF ADRENAL HORMONES. Ciba Foundation Study Group No. 6 in honor of Prof. G. W. Thorn. Editors for the Ciba Foundation—G. E. W. Wolstenholme, O.B.E., M.A., M.B., M.R.C.P., and Maeve O'Connor, B.A. 16 illustrations. Boston: Little, Brown and Company, 1961.

This small booklet of slightly over 100 pages, contains the proceedings of a one-day conference on the Metabolic Effects of Adrenal Hormones, sponsored by the Ciba Foundation, convened in honor of George W. Thorn of Harvard University.

Each of the several papers is followed by a transcript of the general discussion, which is particularly interesting.

The papers are of interest primarily to those engaged in research and those interested primarily in the purely scientific aspects of the subject.

BOOKS RECEIVED

A SYNOPSIS OF CONTEMPORARY PSYCHIATRY. By George A. Ulett, B.A., M.S., Ph.D., M.D., Professor of Psychiatry, Department of Psychiatry and Neurology, Washington University School of Medicine, St. Louis, Mo.; Director of Psychiatric Services, Hospital Division, City of St. Louis, St. Louis, Mo.; Medical Director, Malcolm Bliss Mental Health Center, St. Louis, Mo., and D. Wells Goodrich, M.D., Chief, Biosocial Growth Center, National Institute of Mental Health, National Institutes of Health, United States Public Health Service, Department of Health, Education and Welfare, Bethesda, Md. Second edition. St. Louis: C. V. Mosby Company, 1960. Price, $6.50.

CARCINOGENESIS. Ciba Foundation Symposium. Mechanisms of Action. Editors for the Ciba Foundation, G. E. W. Wolstenholme, O.B.E., M.A., M.B., B.Ch. and Maeve O'Connor, B.A. 48 illustrations. Boston: Little, Brown and Company, 1961. Price, $9.50.

REGULATION OF CELL METABOLISM. Ciba Foundation Symposium. Editors for the Ciba Foundation, G. E. W. Wolstenholme, O.B.E., M.A., M.B., B.Ch. and Cecilia M. O'Connor, B.Sc. 109 illustrations. Boston: Little, Brown and Company, 1961. Price, $9.50.

MEANING AND METHODS OF DIAGNOSIS IN CLINICAL PSYCHIATRY. By Thomas A. Loftus, M.D., Associate Professor of Clinical Psychiatry, The Jefferson Medical College, Philadelphia, Pennsylvania. Philadelphia: Lea and Febiger, 1960. Price, $5.00.

W. B. Saunders Company features the following recent books in their full-page advertisement appearing elsewhere in this issue:

DRIPPS, ECKENHOFF AND VANDAM—INTRODUCTION TO ANESTHESIA. An ideal basic guide to the understanding and safe administration of anesthesia.

CORDAY AND IRVING—DISTURBANCES OF HEART RATE, RHYTHM AND CONDUCTION. Covers management of *all* the cardiac arrhythmias and conduction defects,

A TRAVELER'S GUIDE TO GOOD HEALTH. By Colter Rule, M.D. Dolphin Books. Garden City, New York: Doubleday & Company, Inc., 1961. Price, 95 cents.

Rx for Medics

New York Journal American, June 27, 1961

"Cure thy profession, physician," is the socio-political remedy prescribed to the nation's doctors at the current meeting of the American Medical Association.

Diagnosis shows definite signs of excessive fees, unnecessary surgery, unethical conduct and professional incompetence.

Admittedly these symptoms have appeared among only a small fraction of the 250,000 licensed physicians in the United States; but any doctor worth his Rx pad knows that infection requires prompt, specific and sometimes drastic treatment to prevent its spread.

What one AMA committee called a "hear-no-evil, see-no-evil attitude of many doctors," who are reluctant to penalize colleagues, certainly is not the recommended treatment.

Self-discipline within the medical profession is the least painful and least embarrassing course physicians can take, or else the public—their patients—will demand strong doses of harsher purgatives. And no doctor will be able to argue that he hadn't been warned.

VD Increases in Michigan

Michigan experienced an alarming 221 per cent increase in infectious syphilis during the first quarter of this year over the same period of 1960, a peak year. Of greatest concern to state health authorities is the increase among teenagers. Fourteen of them contracted syphilis in the first three months of this year compared with only four at that time a year ago. A 13 per cent increase in gonorrhea was recorded among teenagers also.

First quarter figures, which are provisional and accordingly subject to some increase as delayed reports are received, showed 77 cases of primary and secondary (early, infectious) syphilis. This was 53 more than during the first quarter of 1960. Gonorrhea showed a 8.6 per cent increase with 2,309 cases reported, 183 more than last year. There were 41 more cases among teenagers than there were a year ago at this time.

KELLOGG HELPS—A grant of $1,073,200 by the W. K. Kellogg Foundation will aid Rutgers University of New Brunswick, New Jersey, to establish a School of the Basic Medical Sciences. Since early 1960, the Foundation has aided the establishment or expansion of schools also at the Universities of Connecticut and New Mexico and at Dartmouth College in New Hampshire.

COMMUNICATIONS

Mr. Hugh W. Brenneman
Public Relations Counsel
Michigan State Medical Society

Dear Mr. Brenneman:

Thank you very much for the political action material that you sent us for our display at the AMA Public Relations Institute. We used it on the exhibit labeled *"Grass Roots"—Legislative Action Materials.* The extra copies were put on a table for a materials exchange.

Your small pamphlets were very well done and we wish we had had more for administrators of other states to pick up at our materials exchange table.

Thanks again.

Sincerely yours,
JACK E. RYON
Division of Field Service
American Medical Association

Chicago, Illinois
September 1, 1961

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Wilfrid Haughey, M.D.
Editor, The Journal MSMS

Dear Doctor Haughey:

I would like to congratulate you and your Editorial Board on the editorial titled "Running Scared" which appeared in THE JOURNAL of the Michigan State Medical Society for September of 1961.

It doesn't really seem necessary that the medical profession, with so many individual successes in the way of cures of the vast percentage of one's patients, should ever have to be on the defensive in presenting our case to the public. However, the national trend towards security and apathy, as far as public events are concerned, seems occasionally even to infect our fellow physicians.

I would feel that this article should repeatedly be emphasized to all our councilors and spokesmen for any segment of the medical profession, no matter how small.

Again, congratulations on the presentation of a positive rather than a negative philosophy.

Very sincerely yours,
WILLIAM T. DAVISON, M.D.

Port Huron, Michigan
October 11, 1961

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Dr. Otto K. Engelke,
President,
Michigan State Medical Society

Dear Doctor Engelke:

I would like to express my deep appreciation for your kind invitation to attend the Session of the Michigan State Medical Society, recently held in Grand Rapids.

While I was able to attend only the business meetings of the first two days, I was impressed by the conduct of your House of Delegates, and I might say that I have never seen a better informed House as a whole, concerning the problems that face organized medicine. You are to be warmly congratulated on the way in which you disseminate information. If every state would follow your example, I think we could reduce our problems to a minimum.

Sincerely yours,
G. A. OWSLEY, M.D., President
Indiana State Medical Association

Hartford City, Indiana
October 3, 1961

Classified Advertising

$2.50 per insertion of fifty words or less, with an additional five cents per word in excess of fifty

PROFESSIONAL BUILDING—30 x 60 brick two-story building with full basement suitable for medical-dental-legal business office and laboratory unit. For sale or rent. Will alter to suit tenants. Located in Detroit suburban area in desperate need of adequately trained people in medicine and surgery and Obstetrics and Gynecology. Excellent new hospital facility readily available. Reply: Box No. 10, Michigan State Medical Society, P.O. Box 152, East Lansing, Michigan.

PHYSICIANS WANTED: Internist and pediatrician for association with established multi-specialty group in Detroit. $16,000-$18,000 first year with annual increases. Reply: Box 12, 120 W. Saginaw Street, East Lansing, Michigan.

FOR SALE: Complete Ophthalmic office equipment. B & L Deluxe Unit. Green Refractor, treatment chairs, perimeter Poser slitlamp, projector, autoclave, ophthalmoscopes. Rare edition books. In daily use and nearly new condition. Reply: Box 14, 120 W. Saginaw Street, East Lansing, Michigan.

FOR SALE: Property zoned for professional use; located in center of Taylor Township, Wayne County, next to a modern professional building; only two practicing M.D.'s in this community of 50,000 people—Regional Planning Commission predicts will have 85,000 by 1970. Ten minutes from modern Oakwood Hospital. For information, call LO 5-6288 or write Taylor Professional Building, 23394 Goddard, Taylor, Michigan.

PARTNER NEEDED: Established general practice. Age: 35-45. Net income $20-30,000. Object: practice good medicine with three months planned vacation per year. Midwest. Write: Box 16, Michigan State Medical Society, 120 W. Saginaw Street, East Lansing, Michigan.

OFFICE SPACE AVAILABLE in ultra modern new professional plaza now under construction on Lansing south side. Near new Lansing General, occupancy November and December. Ample 120 auto parking. Brochure available, call or write Maryan A. Bowerman, Warner & Long Realty, 5332 S. Pennsylvania Ave., Lansing, Michigan. Telephone TUrner 2-2475, TU. 2-5545.

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YOUNG GP DESIRED IN WELL-ESTABLISHED GENERAL PRACTICE: Small town in northern Michigan, excellent residential district and schools; good hospital facilities. Guaranteed salary first year, leading to partnership for right person. Reply: Box 15, Michigan State Medical Society, 120 W. Saginaw Street, East Lansing, Michigan.

PSYCHIATRIC CLINIC DIRECTOR VII: New State Institution for Mentally Retarded Children located in suburbs between Ann Arbor and Detroit, Michigan. Position calls for direction and co-ordination of Professional Services with program aims of research, education and training as well as service to the community. Minimum requirements: Two years of experience as a service chief in a hospital psychiatric setting subsequent to obtaining a diplomate in psychiatry, neurology, or pediatrics and eligibility for a license to practice medicine in Michigan. Paid vacation, sick time allowance, state contributory insurance program and other Michigan Civil Service benefits. Salary ranges from $16,537 to $19,398 annually, depending on qualifications. For further information, contact Personnel Officer, Plymouth State Home and Training School, Northville, Michigan.

WANTED—Part-time physician for small plant in Montague, Michigan. Opportunity for physician to engage also in private practice with only other physician in town who is interested in seeking an associate. Interested applicants should contact and send full resume to Mr. W. F. Riehl, Chief Supervisor, Montague Works, E. I. du Pont de Nemours & Co., Montague, Michigan.

During the year 1960 approximately $100,000,000 were expended on research for heart diseases. In the field of mental health, the research expenditures were about $105,000,000, of which the largest share, $100,000,000, came from the Federal Government.

* * *

Unemployment compensation—jobless pay—in this country is higher than the average hourly wages for employed factory workers in most of Europe.

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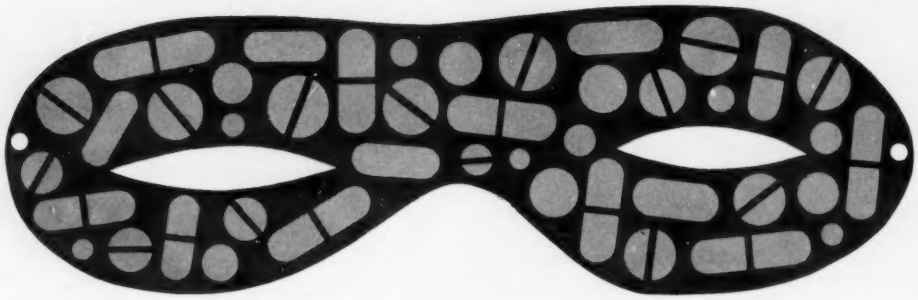

drugs anonymous

One of the several hastily conceived and potentially dangerous suggestions for reducing drug costs is generic-name prescribing. The proponents of generic-name prescribing claim that it will lower drug costs significantly and—through supervision by the Federal Government—provide quality equivalent to that of trademarked drugs. We maintain that these claims are false. Here are some authoritative answers to the principal questions posed by generic-name prescribing.

How much money would be saved if all prescriptions were written for generic-name drugs?

"The [Rhode Island] Division of Public Assistance examined 10,000 drug prescriptions for welfare recipients for the purpose of determining the actual savings . . . of generic versus trade-name drugs. The drugs had cost $28,000. Substituting generic drugs whenever possible would have provided a saving of less than 5 per cent. Syracuse has made a similar study of drug costs with comparable results."

Rhode Island Medical Journal,
January, 1961

Are the savings worth the risk of sacrificing quality?

". . . it is unsafe [to prescribe generically] because there is not sufficient policing of our standards. . . ."

Lloyd C. Miller, Ph. D.
Director of Revision of the U.S.P.

"The naive belief that, if a product was not good, the FDA would prohibit its sale is just not realistic. . . . it is completely impossible for the FDA to check every batch of every product of every manufacturer. . . . Hence the integrity and reputation of the manufacturer assume unusual significance where drugs and health products are concerned."

Albert H. Holland, M.D.
formerly Medical Director of the
Food and Drug Administration

Smith Kline & French Laboratories, Philadelphia

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Hydrocholeretic • Antispasmodic • Sedative...to reduce *TENSION* and anxiety-induced dysfunction of G.I. and biliary tracts...and also relieve both smooth-muscle *spasm* and biliary/intestinal *stasis*

butabarbital sodium ..... 15 mg. (¼ gr.)
(Warning–may be habit forming)
dehydrocholic acid, AMES .....250 mg. (3¾ gr.)
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Average adult dose: 1 or, if necessary, 2 tablets three times daily.

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Precautions: Periodically check patients on DECHOLIN with Belladonna and DECHOLIN-BB for increased intraocular pressure. Also observe patients on DECHOLIN-BB for evidence of barbiturate habituation or addiction, and warn drivers against any risk of drowsiness.

Available: DECHOLIN-BB, in bottles of 100 tablets; DECHOLIN with Belladonna and DECHOLIN, in bottles of 100 and 500.

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Sobee has the rich, creamy appearance that mothers expect of a formula. Sobee is pleasantly bland, without the "burned-bean" flavor or chalky aftertaste frequently associated with a soya formula.

Symptomatic Relief. Symptoms of cow's milk allergy —most frequently manifested by eczema, colic and gastrointestinal disturbances—may be relieved within 2 or 3 days.

Good Stool Pattern. In a study of 102 infants on Sobee, the number of stools ranged from 1 to 4 per day.[1] Soya stools are bulkier than cow's milk stools. Constipation is infrequent.

Easily Prepared. Mothers need add only water to either Sobee liquid or Sobee instant powder to prepare a formula with a nutritional balance comparable to cow's milk formulas.

1. Kane, S.: Am. Pract. & Digest Treat. *8*:65 (Jan.) 1957.

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